NOTICE OF INTENT FOR DISCHARGE PURSUANT TO MASSACHUSETTS REMEDIATION GENERAL PERMIT MAG910000

402 RINDGE AVENUE

CAMBRIDGE, MASSACHUSETTS

JANUARY 25, 2022

Prepared For:

United States Environmental Protection Agency
Office of Ecosystem Protection
5 Post Office Square, Suite 100
Mail Code OEP06-01
Boston, MA 02109-3912

On Behalf Of:

Just-A-Start Corporation
1035 Cambridge Street, #12A
Cambridge, MA 02141

PROJECT NO. 6804

2269 Massachusetts Avenue
Cambridge, MA 02140
www.mcphailgeo.com
(617) 868-1420

January 25, 2022

United States Environmental Protection Agency
Office of Ecosystem Protection
5 Post Office Square, Suite 100
Mail Code OEP06-01
Boston, MA 02109-3912

Attention: EPA/OEP RGP Applications Coordinator

Reference: 402 Rindge Avenue, Cambridge, Massachusetts
Notice of Intent for Temporary Construction Dewatering Discharge;
Massachusetts Remediation General Permit MAG910000

Ladies and Gentlemen:

Enclosed herein is our Notice of Intent for Temporary Construction Dewatering Discharge for the proposed 402 Rindge Avenue, Cambridge, Massachusetts. These services were performed, and this permit application was prepared with the authorization of our client, Just-A-Start Corporation.

We trust that the following satisfies your present requirements. Should you have any questions or comments concerning the following, please do not hesitate to contact us.

Very truly yours,

McPHAIL ASSOCIATES, LLC

John D. Miller

Ambrose J. Donovan, P.E., L.S.P.

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JDM/ajd

GEOTECHNICAL AND GEOENVIRONMENTAL ENGINEERS
2269 Massachusetts Avenue
Cambridge, Massachusetts 02140
(617) 868-1420

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1.0 - INTRODUCTION

1.1 - GENERAL

In accordance with the provisions of the Remediation General Permit MAG910000 that has been prepared for the Commonwealth of Massachusetts, the following is a summary of the site and groundwater quality information in support of a Notice of Intent for the temporary discharge of groundwater to the Little River. The temporary discharge of construction dewatering will occur as part of the proposed redevelopment of the property located at 402 Rindge Avenue in Cambridge, Massachusetts (subject site). Refer to **Figure 1,** Project Location Plan for the general site locus.

These services were performed and this permit application was prepared with the authorization of our client, Just-A-Start Corporation. These services are subject to the limitations contained in **Appendix A**.

The required Notice of Intent Form contained in the RGP permit and City of Cambridge Permit to Dewater are included in **Appendix B**. This project is considered Activity Category III-G as defined in the RGP. Based on the activity category, and in accordance with the RGP, contamination Type A: Inorganics, as defined in Table 2 of the RGP apply.

1.2 – APPLICANT/OPERATOR

The applicant for the Notice of Intent-Remediation General Permit is:

Dellbrook|JKS
One Adams Place, 859 Willard Street
Quincy, MA 02169

Attention: Mr. Scott MacLeod
Tel: (781) 380-1675
Email: smacleod@dellbrookjks.com

1.3 – SITE OWNER

Just-A-Start Corporation
1035 Cambridge Street, #12A
Cambridge, MA 02141

Attention: Ms. Vandana Sareen
Tel: (617) 494-0444
Email: vandanasareen@justastart.org

2.0 – SITE AND PROJECT DESCRIPTION

2.1 – EXISTING SITE CONDITIONS

Fronting onto Rindge Avenue to the north, the 3.572-acre subject site is bounded by Alewife Brook Parkway to the west, the MBTA commuter rail right-of-way to the south and by residential buildings to the east. The subject site is occupied by parking areas and landscaped margins. The site gradually slopes upward from north to south from approximately Elevation +20 to approximately Elevation +25.

The limits of the subject site are shown on **Figure 2**, which was prepared from a 30-scale plan of the subject site entitled "Topographic Plan" dated November 11, 2014 and prepared by R.E. Cameron & Associates, Inc.

2.2 – PROPOSED DEVELOPMENT

It is understood that the proposed scope of development, identified as Building A, will consist of a 6-story mixed use building occupying the northwestern portion of the site and will include educational and training spaces on the ground and first floor, with residential units above. This new structure is proposed to occupy an approximate plan area of 9,425 square feet with the lowest level currently proposed at about the existing ground surface at approximate Elevation +22.0 and partially constructed in "podium style".

No below grade space is planned for the proposed structures at this time. It is understood that the remainder of the site will remain as paved driveways and parking lots.

The approximate locations of the proposed building footprint, utilities, and stormwater detention system are shown on **Figure 2**. Areas surrounding the building will consist of hardscape, walkways, and landscaping.

2.3 – SITE ENVIRONMENTAL SETTING AND SURROUNDING HISTORICAL PLACES

Based on an online edition of the Massachusetts Geographic Information Systems DEP Priority Resources Map viewed on September 2, 2021, the subject site is not located within the boundaries of a Potentially Productive Aquifer or within a Zone II, Interim Wellhead Protection Area as defined by the Massachusetts DEP. Further, there are no public or private drinking water supply wells, no Areas of Critical Environmental Concern, no fish habitats, no habitats of Species of Special Concern or Threatened or Endangered Species within specified distances of the subject site. The former City of Cambridge New Street Landfill and former Harvey Street Sludge Landfill are noted as being located within 1,000 feet of the site. Based on EDR's search of FEMA Flood Plain Maps, the northern portion of the subject site is within a 500-year flood plain. A copy of the GIS map is included in **Appendix C.**

Based on the GIS map, there are no water bodies or wetland areas at the subject site. The closest water body to the subject site is Jerry's Pond located on the opposite side of Rindge

Avenue to the northeast of the subject site. According to a previous environmental report prepared for the subject site, groundwater on the northern portion of the subject site flows to the north, whereas groundwater on the central and southern portions of the subject site flows to the south-southeast.

A review of information provided by the U.S. Fish and Wildlife Service in an Information for Planning and Conservation (IPaC) Trust Resource Report for the project site did not identify the presence of threatened or endangered species at or in the vicinity of the discharge location and/or discharge outfall. Further, the Trust Resource Report did not identify the presence of a critical habitat in the vicinity of the discharge outfall and/or discharge location. Based upon the above, the site is considered a Criterion A pursuant to Appendix IV of the RGP. A copy of the IPaC Trust Resource Report and U.S. Fish and Wildlife Service's Nationwide Standard Conservation Measures are included in **Appendix C**.

The subject site is not listed on the State or National Register of Historical Places. Copies of the State of Massachusetts MACRIS reports are included in **Appendix C**.

It is anticipated that treated construction dewatering effluent will be temporarily discharged into the City of Cambridge storm drain system that flows into the Little River. Based on the anticipated duration of construction dewatering and the location of its discharge into the subsurface structures that lead to the Little River, construction dewatering activities are not considered to affect elements of historical listings. Hence, the site meets Permit Eligibility Criterion B in accordance with Appendix III of the RGP.

2.4 – SITE AND RELEASE HISTORY

Historical information suggests that the southern portion of the subject site was occupied by a brick manufacturer, known as Foley's Pit, from at least 1844 through the mid-1960's. The northern portion of the site was occupied by a pond during the same time period. Historical records indicate that the pond was likely an abandoned clay pit. The 1969 aerial photograph depicts the subject site as a vacant parcel with no pond, indicating that the pond had been filled in. The brick manufacturing building had been demolished and the pond had been filled at some point after 1960. The aerial photograph from 1970 also shows the subject site as a vacant parcel. The 1978 aerial photograph depicts the area adjacent to the southeast of the subject site as being occupied by the existing high-rise apartment building and parking lot. Sanborn Maps and aerial photographs indicate the site has remained generally unchanged since this time.

MCP Release History

The subject site is a MassDEP listed release site with the assigned Release Tracking Number (RTN) 3-14739. It is understood that elevated concentrations of polycyclic aromatic hydrocarbons (PAHs) and total petroleum hydrocarbons (TPH) were encountered in soil during a series of subsurface explorations conducted in 1996 and 1997. The elevated concentrations were considered to be the result of previous industrial activities performed at

the site and the filling of the former pond/clay pit. The DEP was notified of the release condition on January 17, 1997.

An initial Release Abatement Measure (RAM) Plan was submitted to the DEP on July 1, 1998, which outlined soil and groundwater management practices for construction activities. Following the completion of RAM activities, a Method 3 Risk Assessment was performed at the site. A Class A-3 Response Action Outcome (RAO) Statement which included an Activity and Use Limitation (AUL) was submitted to the DEP on January 22, 1999. The AUL is understood to apply to the entire subject site.

A subsequent RAM Plan was prepared for the subject site by McPhail Associates, LLC (McPhail) on July 5, 2016 which detailed soil management practices associated with site improvements. A RAM Completion report was filed with the DEP on November 1, 2017.

3.0 – CONSTRUCTION SITE DEWATERING AND TREATMENT

3.1 – SITE DEWATERING DETAILS

As noted above, construction of the lowest level slab is proposed at existing ground surface at approximately Elevation +22.0. Groundwater was encountered at the subject site at varying levels from Elevation +20.08 to Elevation +14.41, which corresponds to a depth of approximately 2 to 6 feet below ground surface. As a result, it is likely that the excavation of the proposed building foundations will encounter groundwater.

In the event that groundwater levels are higher than those observed or during heavy precipitation events that require construction dewatering to facilitate excavation, the maximum rate of dewatering will be on the order of 100 gallons per minute (gpm). Given the extent of excavation, temporary on-site collection and recharge of groundwater is not feasible as part of the proposed construction activities. As a result, construction dewatering will require the discharge of collected groundwater into the municipal storm drain system under the requested Remediation General Permit.

A review of available subgrade utility plans provided by the City of Cambridge Department of Public Works indicates that stormwater is collected within an on-site catch basin located on the southern portion of the subject site. The catch basin connects to the stormwater drain system beneath a parking area in the southern portion of the site and flows east crossing beneath Alewife Brook Parkway. The conduit continues east beneath CambridgePark Drive and then into a northerly direction. The conduit eventually discharges into the Little River at D45OF0000. The location of the relevant stormwater catch basin in relation to the subject site is indicated on **Figure 2**. The flow path of the discharge is shown in plans provided by the City of Cambridge, which is included in **Figure 3**.

3.2 – SUMMARY OF GROUNDWATER AND SURFACE WATER ANALYSIS

In December 2021, McPhail Associates, LLC obtained one (1) sample of groundwater at the subject site from monitoring well GP-10(OW). The groundwater sample was submitted to a certified laboratory for analysis for the presence of compounds required to be tested for under the EPA's Remediation General Permit (RGP) application, including metals, polynuclear aromatic hydrocarbons (PAHs), pH, ammonia, total suspended solids (TSS), total residual chlorine (TRC), hardness, chloride, and cyanide. Analytical results of the testing of the above referenced groundwater sample that was obtained in December 2021 are summarized on the enclosed **Table 1**, and laboratory data is included in **Appendix D**.

A surface water sample was obtained from the Little River (42° 23' 44'' N, 71° 8' 38'' W) in December 2021 and analyzed for the presence of pH, total iron, total lead, hardness, and ammonia nitrogen. Analytical test results are included on the enclosed **Table 2**, and laboratory data is included in **Appendix D**.

A Dilution Factor (DF) was calculated for the detected levels of metals pursuant to the procedure contained in RGP MAG910000, Appendix V. The purpose of the DF calculation is to establish Total Recoverable Limits for metals, taking into consideration the anticipated dilution of the detected analyte upon discharge into the Little River. The calculated DF was then used to find the appropriate Dilution Range Concentrations (DRCs) contained in MAG910000, Appendix IV. The Minimum Flow Rate calculated by the USGS Streamstats GIS database at the location of discharge into the Little River for 7 consecutive days with a recurrence interval of 10 years (7Q10 flow) is 0.142 ft^3/sec thus resulting in a DF of 1.99 assuming a design flow rate of 100 GPM.

In summary, groundwater testing performed at the subject site has detected concentrations of total iron and lead in excess of the applicable Water Quality Based Effluent Limitations contained in Table 2 of Section 2.1 of the RGP. The detected concentrations of the tested constituents detected in the on-site groundwater and surface water samples are further summarized in the MA Limits book tables that are included in **Appendix C**.

In accordance with the RGP and given that the subject site is a listed DEP release site, the proposed dewatering associated with this permit application is considered Contaminated/Formerly Contaminated Site Dewatering (Category III). Given that the site contamination is considered "Known", this project is considered Activity Category III-G as defined in the RGP. Based on the activity category, and in accordance with the RGP, contamination Type A: Inorganics, as defined in Table 2 of the RGP apply.

3.3 – GROUNDWATER TREATMENT

Based upon the anticipated rates of construction dewatering in conjunction with the results of the above referenced groundwater analyses, it is our opinion that a treatment system consisting of an approximately 8,000-gallon capacity settling tank and bag filters in series is necessary to meet the effluent limitations of the RGP. These treatment components will be used to settle out particulate matter containing inorganic compounds in the effluent to meet

the applicable discharge limits established by the US EPA prior to discharge. If increased pH levels are detected in the effluent (such as during the placement of concrete for the foundation system) carbon dioxide gas for pH adjustment will be utilized, if necessary, as construction activities at the subject site transition from excavation to installation of concrete footings. If the addition of concrete requires a pH conditioner to meet permit effluent limitations or applicable water quality standards, a Notice of Change (NOC) will be filed on behalf of the operator with the specific laboratory data sheets and necessary information attached.

A schematic of the treatment system is shown on **Figure 4**.

A Best Management Practices Plan (BMPP) has been prepared as **Appendix F** to the RGP and will be posted at the site during the time period that temporary construction dewatering is occurring at the site.

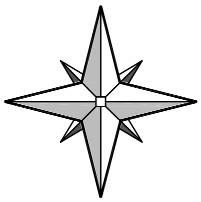
4.0 – SUMMARY AND CONCLUSIONS

The purpose of this report is to summarize site environmental conditions and groundwater data to support a Notice of Intent to discharge under the Remediation General Permit, for the off-site discharge of dewatered groundwater which may be encountered during the redevelopment of the subject site. The groundwater testing results reported in this application have been provided to the site owner.

Based on the results of the above referenced groundwater analyses, treatment of construction dewatering effluent will be necessary to meet the discharge limits for inorganic compounds established by the US EPA prior to off-site discharge. The proposed construction dewatering effluent treatment system will consist of an 8,000-gallon capacity settling tank, bag filters and, if required, pH adjustment tank and GAC filters in series in order to meet the discharge limits established by the RGP. However, should the effluent monitoring results identify concentrations of contaminants that are in excess of the limits established by the RGP, additional mitigative measures will be implemented to meet the allowable discharge limits.

FIGURES

FIGURE 1



SCALE 1:25,000

PROJECT LOCATION PLAN

RINDGE COMMONS

CAMBRIDGE MASSACHUSETTS

McPHAIL ASSOCIATES, LLC
Geotechnical and Geoenvironmental Engineers
2269 Massachusetts Avenue
Cambridge, MA 02140
617/868-1420
617/868-1423 (Fax)
www.mcphailgeo.com

FIGURE 2

NORTH

ALEWIFE BROOK PARKWAY
(PUBLIC WAY)
MDC – 1992 LAYOUT NO. 7102

APPROXIMATE LIMITS OF PROPOSED BUILDING A

APPROXIMATE LIMITS OF PROPOSED BUILDING B

APPROXIMATE LOCATION OF CATCH BASIN FOR DISCHARGE

AREA = 155,591± S.F
3.57± Acres

B-103A
B-103
B-8
B-7
B-10
GP-2
B-9
B-111
B-12
GP-1
B-104
B-104A
B-13
B-14
B-15
B-105
B-106
B-6
GP-3
GP-4
B-4
GP-9
B-2
B-101
GP-11
GP-8
B-102
GP-10
B-5
B-3
B-1
GP-12
GP-5
GP-7
B-16
GP-6

N/F BOSTON AND MAINE RAILROAD
N/F RINDGE ASSOCIATES
N/F RINDGE ASSOCIATES
N/F ALEWIFE BROOK CONDOMINUM
RINDGE AVENUE (PUBLIC WAY)

GRAPHIC SCALE
50 0 50 100

LEGEND

— APPROXIMATE LOCATION OF BORING PERFORMED BY CARR-DEE CORP. DURING THE PERIOD OF JUNE 25 THROUGH JULY 2, 2019 FOR McPHAIL ASSOCIATES, LLC

— APPROXIMATE LOCATION OF BORING PERFORMED BY CARR-DEE CORP. DURING THE PERIOD OF OCTOBER 22 THROUGH OCTOBER 31, 2019 FOR McPHAIL ASSOCIATES, LLC

— APPROXIMATE LOCATION OF GEOPROBE PERFORMED BY TECHNICAL DRILLING SERVICES, INC. ON MAY 13, 2021 FOR McPHAIL ASSOCIATES, LLC

REFERENCE: THIS PLAN WAS PREPARED FROM A 30-SCALE DRAWING ENTITLED "TOPOGRAPHIC PLAN" DATED NOVEMBER 11, 2014 BY R.E. CAMERON & ASSOCIATES, INC.

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RINDGE COMMONS
CAMBRIDGE MASSACHUSETTS
SUBSURFACE EXPLORATION PLAN
FOR
JUST A START CORPORATION
BY
McPHAIL ASSOCIATES, LLC

Date: JANUARY 2022	Dwn: M.B.S.	Chkd: N.T.D.	Scale: 1" = 50'
Project No: 6804			

FILE NAME: \\McPhail-fs2\McPhail\AcadJOBS\6804\RGT\6804-F02.dwg

FIGURE 3

60" OUTFALL
#D450F0000

STEEL PL

CAMBRIDGEPARK DR

APPROXIMATE LIMITS
OF SUBJECT SITE

RINDGE AVE

SITE DISCHARGE
FLOW PATH

ALEWIFE BROOK PKWY

FAWCETT ST

FILE NAME: \\McPhail-fs2\McPhail\Acad\JOBS\6804\RGP\6804-F03.dwg

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402 RINDGE AVENUE

CAMBRIDGE MASSACHUSETTS

DISCHARGE LOCATION PLAN

FOR

JUST-A-START CORPORATION

BY

McPHAIL ASSOCIATES, LLC

Date: JANUARY 2022	Dwn: M.B.S.	Chkd: J.D.M.	Scale: N.T.S.
Project No: 6804			

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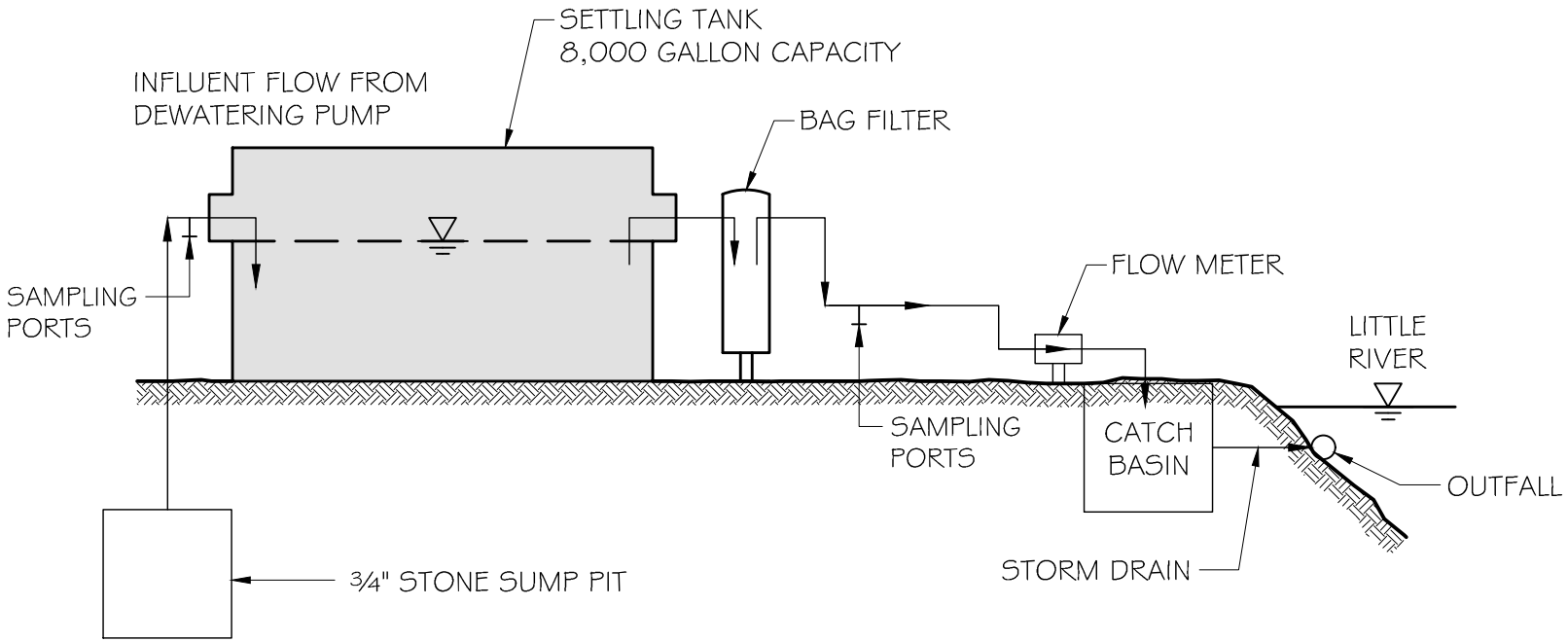
FIGURE 4



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402 RINDGE AVENUE
CAMBRIDGE MASSACHUSETTS

SCHEMATIC OF TREATMENT SYSTEM
FOR
JUST-A-START CORPORATION
BY
McPHAIL ASSOCIATES, LLC
CONSULTING GEOTECHNICAL ENGINEERS

Date: JANUARY 2022	Dwn: M.B.S.	Chkd: J.D.M.	Scale: N.T.S.
Project No: 6804			

TABLES

TABLE 1
ANALYTICAL RESULTS - GROUNDWATER

402 Rindge Avenue
Cambridge, MA
Project No. 6804

LOCATION	MassDEP RCGW-2	MassDEP GW-3	Water Quality Based Effluent Limitation	Technology Based Effluent Limitation	GP-10 (OW)
SAMPLING DATE					12/3/2021
LAB SAMPLE ID					L2166691-01
SAMPLE TYPE					WATER
A. Inorganics					
Nitrogen, Ammonia (mg/L)			Reporting		10.7
Chloride (µg/L)			Reporting		508000
Chlorine, Total Residual (µg/L)			1100	200	ND(20)
Solids, Total Suspended (mg/L)			30		90
pH (H)			6.5-8.3		7.4
Hardness (mg/L)					432
Antimony, Total (µg/L)	8000	8000	640	206	ND(4)
Arsenic, Total (µg/L)	900	900	10	104	1.18
Cadmium, Total (µg/L)	4	4	0.25	10.2	ND(0.2)
Chromium, Trivalent (µg/L)	600	600	74	323	ND(10)
Chromium, Hexavalent (µg/L)	300	300	11	323	ND(10)
Chromium, Total (µg/L)	300	300			1.31
Copper, Total (µg/L)	100000		9	242	1.43
Iron, Total (µg/L)			1000	5000	8390
Lead, Total (µg/L)	10	10	2.5	160	4.43
Mercury, Total (µg/L)	20	20	0.77	0.739	ND(0.2)
Nickel, Total (µg/L)	200	200	52	1450	4.06
Selenium, Total (µg/L)	100	100	5	235.8	ND(5)
Silver, Total (µg/L)	7	7	3.2	35.1	ND(0.4)
Zinc, Total (µg/L)	900	900	120	420	27.04
Cyanide, Total (µg/L)	30	30	5.2	178	ND(5)
B. Non-Halogenated Volatile Organic Compounds					
Total BTEX (µg/L)			100		ND(1)
Benzene (µg/L)	1000	10000	5		ND(1)
Toluene (µg/L)	40000	40000			ND(1)
Ethylbenzene (µg/L)	5000	5000			ND(1)
p/m-Xylene (µg/L)	3000	5000			ND(2)
o-xylene (µg/L)	3000	5000			ND(1)
Xylenes, Total (µg/L)	3000	5000			ND(1)
1,4-Dioxane (µg/L)	6000	50000	200		ND(5)
Acetone (µg/L)	50000	50000	7970		ND(10)
Phenolics, Total (µg/L)			300	1080	ND(30)
C. Halogenated Volatile Organic Compounds					
Carbon tetrachloride (µg/L)	2	5000	1.6	4.4	ND(1)
1,2-Dichlorobenzene (µg/L)	2000	2000	600		ND(5)
1,3-Dichlorobenzene (µg/L)	6000	50000	320		ND(5)
1,4-Dichlorobenzene (µg/L)	60	8000	5		ND(5)
Total dichlorobenzene			763		ND
1,1-Dichloroethane (µg/L)	2000	20000	70		ND(1.5)
1,2-Dichloroethane (µg/L)	5	20000	5		ND(1.5)
1,1-Dichloroethene (µg/L)	80	30000	3.2		ND(1)
Methylene chloride (µg/L)	2000	50000	4.6		ND(1)
1,1,1-Trichloroethane (µg/L)	4000	20000	200		ND(2)
1,1,2-Trichloroethane (µg/L)	900	50000	5		ND(1.5)
Trichloroethene (µg/L)	5	5000	5		ND(1)
Tetrachloroethene (µg/L)	50	30000	3.3	5	ND(1)
cis-1,2-Dichloroethene (µg/L)	20	50000	70		ND(1)
Vinyl chloride (µg/L)	2	50000	2		ND(1)
1,2-Dibromoethane (µg/L)	2	50000			ND(0.01)
1,2-Dibromo-3-chloropropane (µg/L)	1000				ND(0.01)
1,2,3-Trichloropropane (µg/L)	10000				ND(0.01)
D. Non-Halogenated Sem-Volatile Organic Compounds					
Bis(2-ethylhexyl)phthalate (µg/L)	50000	50000	3	Sum = 190	ND(2.2)
Butyl benzyl phthalate (µg/L)	10000				ND(5)
Di-n-butylphthalate (µg/L)	5000				ND(5)
Di-n-octylphthalate (µg/L)	100000				ND(5)
Diethyl phthalate (µg/L)	9000	9000			ND(5)
Dimethyl phthalate (µg/L)	50000	50000			ND(5)
Total Group I PAHs			1.01	As Individual	ND
Benzo(a)anthracene (µg/L)	1000	1000	0.0038	As Total Group I PAHs	ND(0.1)
Benzo(a)pyrene (µg/L)	500	500	0.0038		ND(0.1)
Benzo(b)fluoranthene (µg/L)	400	400	0.0038		ND(0.1)
Benzo(k)fluoranthene (µg/L)	100	100	0.0038		ND(0.1)
Chrysene (µg/L)	70	70	0.0038		ND(0.1)
Dibenzo(a,h)anthracene (µg/L)	40	40	0.0038		ND(0.1)
Indeno(1,2,3-cd)pyrene (µg/L)	100	100	0.0038		ND(0.1)
Total Group II PAHs			100		0.408
Acenaphthene (µg/L)	10000	10000		As Total Group II PAHs including Naphthalene	0.18
Acenaphthylene (µg/L)	40	40			ND(0.1)
Anthracene (µg/L)	30	30			ND(0.1)
Benzo(ghi)perylene (µg/L)	20	20			ND(0.1)
Fluoranthene (µg/L)	200	200			0.102
Fluorene (µg/L)	40	40			ND(0.1)
Phenanthrene (µg/L)	10000	10000			0.126
Naphthalene (µg/L)	700	20000	20		ND(0.1)
Pyrene (µg/L)	20	20			ND(0.1)
E. Halogenated Semi-Volatile Organic Compounds					
Total Polychlorinated Biphenyls (µg/L)	5	10	0.000064		ND(0.2)
Pentachlorophenol (µg/L)	200	200	1		ND(1)
F. Fuels Parameters					
TPH, SGT-HEM (mg/L)	5	5	5		ND(3.6)
Ethanol (mg/L)			Reporting		ND(20)
Methyl tert butyl ether (µg/L)	5000	50000	20	70	ND(10)
Tert-Butyl Alcohol (µg/L)			120		ND(100)
Tertiary-Amyl Methyl Ether (µg/L)			90		ND(20)

ND - not detected in excess of the laboratory reporting limit in ()
Bold - exceeds EPA water quality criteria - freshwater (chronic)

TABLE 2
ANALYTICAL RESULTS - RECEIVING WATER

402 Rindge Avenue
Cambridge, MA
Project No. 6804

LOCATION	MassDEP RCGW-2	MassDEP GW-3	Water Quality Based Effluent	Technology Based Effluent Limitation	OUTFALL
SAMPLING DATE					12/15/2021
LAB SAMPLE ID					L2169080-01
SAMPLE TYPE					WATER
A. Inorganics					
Nitrogen, Ammonia (mg/L)			Reporting		2.6
pH (H)			6.5-8.3		7.1
Hardness (mg/L)					235
Iron, Total (µg/L)			1000	5000	3780
Lead, Total (µg/L)	10	10	2.5	160	11.32

ND - not detected in excess of the laboratory reporting limit in ()
Bold - exceeds EPA water quality criteria - freshwater (chronic)

APPENDIX A:

LIMITATIONS

LIMITATIONS

The purpose of this report is to present the results of testing of groundwater samples obtained from on-site monitoring wells in connection with the redevelopment of the 402 Rindge Avenue property in Cambridge, Massachusetts, in support of an application for approval of construction site dewatering discharge into surface waters of the Commonwealth of Massachusetts under EPA's Massachusetts Remediation General Permit MAG910000.

The observations were made under the conditions stated in this report. The conclusions presented above were based on these observations. If variations in the nature and extent of subsurface conditions between the spaced subsurface explorations become evident in the future, it will be necessary to re-evaluate the conclusions presented herein after performing on-site observations and noting the characteristics of any variations.

The conclusions submitted in this report are based in part upon laboratory test data obtained from analysis of groundwater samples, and are contingent upon their validity. The data have been reviewed, and interpretations have been made in the text. It should also be noted that fluctuations in the types and levels of contaminants and variations in their flow paths may occur due to changes in seasonal water table, past practices used at the site, and other factors.

Laboratory analyses have been performed for specific constituents during the course of this assessment, as described in the text.

This report and application have been prepared on behalf of and for the exclusive use of Just-A-Start Corporation and Dellbrook|JKS. This report and the findings contained herein shall not, in whole or in part, be disseminated or conveyed to any other party, other than submission to relevant governmental agencies, nor used in whole or in part by any other party without the prior written consent of McPhail Associates, LLC.

APPENDIX B:

NOTICE OF INTENT TRANSMITTAL FORM

II. Suggested Format for the Remediation General Permit Notice of Intent (NOI)

A. General site information:

<table>
<tr><td rowspan="4">1. Name of site:
402 Rindge Avenue</td><td colspan="3">Site address: 402 Rindge Avenue
Street:</td></tr>
<tr><td colspan="2">City: Cambridge</td><td>State: MA</td><td>Zip: 02140</td></tr>
<tr><td colspan="3">Contact Person: Vandana Sareen</td></tr>
<tr><td colspan="2">Telephone: 617-494-0444</td><td>Email: vandanasareen@justastart.org</td></tr>
<tr><td rowspan="4">2. Site owner
Just-A-Start Corporation

Owner is (check one): ☐ Federal ☐ State/Tribal ■ Private
☐ Other; if so, specify:</td><td colspan="3">Mailing address: 1035 Cambridge Street, #12A
Street:</td></tr>
<tr><td colspan="2">City: Cambridge</td><td>State: MA</td><td>Zip: 02141</td></tr>
<tr><td colspan="3">Contact Person: Scott MacLeod</td></tr>
<tr><td colspan="2">Telephone: 781-380-1675</td><td>Email: smacleod@dellbrookjks.com</td></tr>
<tr><td rowspan="3">3. Site operator, if different than owner
Dellbrook|JKS</td><td colspan="3">Mailing address:
Street: One Adams Place, 859 Willard Street</td></tr>
<tr><td colspan="2">City: Quincy</td><td>State: MA</td><td>Zip: 02169</td></tr>
<tr><td colspan="3"></td></tr>
<tr><td>4. NPDES permit number assigned by EPA:

NPDES permit is (check all that apply: ■ RGP ☐ DGP ☐ CGP
☐ MSGP ☐ Individual NPDES permit ☐ Other; if so, specify:</td><td colspan="4">5. Other regulatory program(s) that apply to the site (check all that apply):
■ MA Chapter 21e; list RTN(s): 3-0014739
☐ NH Groundwater Management Permit or Groundwater Release Detection Permit:
☐ CERCLA
☐ UIC Program
☐ POTW Pretreatment
☐ CWA Section 404</td></tr>
</table>

B. Receiving water information:

1. Name of receiving water(s):	Waterbody identification of receiving water(s):	Classification of receiving water(s):
Alewife Brook/Little River	MA71-04	B

Receiving water is (check any that apply): ☐ Outstanding Resource Water ☐ Ocean Sanctuary ☐ territorial sea ☐ Wild and Scenic River

2. Has the operator attached a location map in accordance with the instructions in B, above? (check one): ■ Yes ☐ No

Are sensitive receptors present near the site? (check one): ☐ Yes ■ No
If yes, specify:

3. Indicate if the receiving water(s) is listed in the State's Integrated List of Waters (i.e., CWA Section 303(d)). Include which designated uses are impaired, and any pollutants indicated. Also, indicate if a final TMDL is available for any of the indicated pollutants. For more information, contact the appropriate State as noted in Part 4.6 of the RGP. Copper, lead, oil&grease, PCBs, phosphorus, pathogens

4. Indicate the seven day-ten-year low flow (7Q10) of the receiving water determined in accordance with the instructions in Appendix V for sites located in Massachusetts and Appendix VI for sites located in New Hampshire.	0.142
5. Indicate the requested dilution factor for the calculation of water quality-based effluent limitations (WQBELs) determined in accordance with the instructions in Appendix V for sites in Massachusetts and Appendix VI for sites in New Hampshire.	1.99

6. Has the operator received confirmation from the appropriate State for the 7Q10and dilution factor indicated? (check one): ■ Yes ☐ No
If yes, indicate date confirmation received: 01/03/2022

7. Has the operator attached a summary of receiving water sampling results as required in Part 4.2 of the RGP in accordance with the instruction in Appendix VIII? (check one): ■ Yes ☐ No

C. Source water information:

1. Source water(s) is (check any that apply):

■ Contaminated groundwater Has the operator attached a summary of influent sampling results as required in Part 4.2 of the RGP in accordance with the instruction in Appendix VIII? (check one): ■ Yes ☐ No	☐ Contaminated surface water Has the operator attached a summary of influent sampling results as required in Part 4.2 of the RGP in accordance with the instruction in Appendix VIII? (check one): ☐ Yes ■ No	☐ The receiving water ☐ A surface water other than the receiving water; if so, indicate waterbody:	☐ Potable water; if so, indicate municipality or origin: ☐ Other; if so, specify:

2. Source water contaminants: Total suspended solids, inorganic metals	
a. For source waters that are contaminated groundwater or contaminated surface water, indicate are any contaminants present that are not included in the RGP? (check one): ☐ Yes ■ No If yes, indicate the contaminant(s) and the maximum concentration present in accordance with the instructions in Appendix VIII.	b. For a source water that is a surface water other than the receiving water, potable water or other, indicate any contaminants present at the maximum concentration in accordance with the instructions in Appendix VIII? (check one): ☐ Yes ☐ No
3. Has the source water been previously chlorinated or otherwise contains residual chlorine? (check one): ☐ Yes ■ No	

D. Discharge information

1.The discharge(s) is a(n) (check any that apply): ☐ Existing discharge ■ New discharge ☐ New source	
Outfall(s): Little River/Alewife Brook	Outfall location(s): (Latitude, Longitude) 42.395656, -71.144041
Discharges enter the receiving water(s) via (check any that apply): ☐ Direct discharge to the receiving water ■ Indirect discharge, if so, specify: Discharge into Little River/Alewife Brook through city of Cambridge stormwater lines ☐ A private storm sewer system ■ A municipal storm sewer system If the discharge enters the receiving water via a private or municipal storm sewer system: Has notification been provided to the owner of this system? (check one): ■ Yes ☐ No Has the operator has received permission from the owner to use such system for discharges? (check one): ■ Yes ☐ No, if so, explain, with an estimated timeframe for obtaining permission: Has the operator attached a summary of any additional requirements the owner of this system has specified? (check one): ■ Yes ☐ No	
Provide the expected start and end dates of discharge(s) (month/year): 3/2022 - 3/2024 Indicate if the discharge is expected to occur over a duration of: ☐ less than 12 months ■ 12 months or more ☐ is an emergency discharge	
Has the operator attached a site plan in accordance with the instructions in D, above? (check one): ■ Yes ☐ No	

<table>
<tr><td>2. Activity Category: (check all that apply)</td><td colspan="2">3. Contamination Type Category: (check all that apply)</td></tr>
<tr><td rowspan="4">☐ I – Petroleum-Related Site Remediation
☐ II – Non-Petroleum-Related Site Remediation
■ III – Contaminated Site Dewatering
☐ IV – Dewatering of Pipelines and Tanks
☐ V – Aquifer Pump Testing
☐ VI – Well Development/Rehabilitation
☐ VII – Collection Structure Dewatering/Remediation
☐ VIII – Dredge-Related Dewatering</td><td colspan="2">a. If Activity Category I or II: (check all that apply)

☐ A. Inorganics
☐ B. Non-Halogenated Volatile Organic Compounds
☐ C. Halogenated Volatile Organic Compounds
☐ D. Non-Halogenated Semi-Volatile Organic Compounds
☐ E. Halogenated Semi-Volatile Organic Compounds
☐ F. Fuels Parameters</td></tr>
<tr><td colspan="2">b. If Activity Category III, IV, V, VI, VII or VIII: (check either G or H)</td></tr>
<tr><td>■ G. Sites with Known Contamination</td><td>☐ H. Sites with Unknown Contamination</td></tr>
<tr><td>c. If Category III-G, IV-G, V-G, VI-G, VII-G or VIII-G: (check all that apply)

■ A. Inorganics
☐ B. Non-Halogenated Volatile Organic Compounds
☐ C. Halogenated Volatile Organic Compounds
☐ D. Non-Halogenated Semi-Volatile Organic Compounds
☐ E. Halogenated Semi-Volatile Organic Compounds
☐ F. Fuels Parameters</td><td>d. If Category III-H, IV-H, V-H, VI-H, VII-H or VIII-H Contamination Type Categories A through F apply</td></tr>
</table>

4. Influent and Effluent Characteristics

Parameter	Known or believed absent	Known or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Influent		Effluent Limitations	
						Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
A. Inorganics									
Ammonia		✔	1	121,4500	75.0	10700	10700	Report mg/L	---
Chloride		✔	1	44,300.0	25000	508000	508000	Report µg/l	---
Total Residual Chlorine	✔		1	121,4500	20.0	<DL	<DL	0.2 mg/L	NA
Total Suspended Solids		✔	1	121,2540D	5000	90000	90000	30 mg/L	---
Antimony	✔		1	3,200.8	4.0	<DL	<DL	206 µg/L	NA
Arsenic	✔	✔	1	3,200.8	1.0	1.18	1.18	104 µg/L	NA
Cadmium	✔		1	3,200.8	0.2	<DL	<DL	10.2 µg/L	NA
Chromium III	✔		1	107,-	10.0	<DL	<DL	323 µg/L	NA
Chromium VI	✔		1	1,7196A	10.0	<DL	<DL	323 µg/L	NA
Copper	✔		1	3,200.8	1.0	1.43	1.43	242 µg/L	NA
Iron		✔	1	19,200.7	50.0	8390	8390	5,000 µg/L	3780
Lead	✔		1	3,200.8	1.0	4.43	4.43	160 µg/L	11.32
Mercury	✔		1	3,245.1	0.2	<DL	<DL	0.739 µg/L	NA
Nickel	✔		1	3,200.8	2.0	4.06	4.06	1,450 µg/L	NA
Selenium	✔		1	3,200.8	5.0	<DL	<DL	235.8 µg/L	NA
Silver	✔		1	3,200.8	0.4	<DL	<DL	35.1 µg/L	NA
Zinc	✔		1	3,200.8	10.0	27.04	27.04	420 µg/L	NA
Cyanide	✔		1	121,4500	5.0	<DL	<DL	178 mg/L	NA
B. Non-Halogenated VOCs									
Total BTEX	✔		1	128,624.1	1.0	<DL	<DL	100 µg/L	---
Benzene	✔		1	128,624.1	1.0	<DL	<DL	5.0 µg/L	---
1,4 Dioxane	✔		1	128,624.1	5.0	<DL	<DL	200 µg/L	---
Acetone	✔		1	128,624.1	10.0	<DL	<DL	7.97 mg/L	---
Phenol	✔		1	128,624.1	30.0	<DL	<DL	1,080 µg/L	NA

Parameter	Known or believed absent	Known or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Influent		Effluent Limitations	
						Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
C. Halogenated VOCs									
Carbon Tetrachloride	✔		1	128,624.1	1.0	<DL	<DL	4.4 µg/L	NA
1,2 Dichlorobenzene	✔		1	128,624.1	5.0	<DL	<DL	600 µg/L	---
1,3 Dichlorobenzene	✔		1	128,624.1	5.0	<DL	<DL	320 µg/L	---
1,4 Dichlorobenzene	✔		1	128,624.1	5.0	<DL	<DL	5.0 µg/L	---
Total dichlorobenzene	✔		1	128,624.1	5.0	<DL	<DL	763 µg/L in NH	---
1,1 Dichloroethane	✔		1	128,624.1	1.5	<DL	<DL	70 µg/L	---
1,2 Dichloroethane	✔		1	128,624.1	1.5	<DL	<DL	5.0 µg/L	---
1,1 Dichloroethylene	✔		1	128,624.1	1.0	<DL	<DL	3.2 µg/L	---
Ethylene Dibromide			0			<DL	<DL	0.05 µg/L	---
Methylene Chloride	✔		1	128,624.1	1.0	<DL	<DL	4.6 µg/L	---
1,1,1 Trichloroethane	✔		1	128,624.1	2.0	<DL	<DL	200 µg/L	---
1,1,2 Trichloroethane	✔		1	128,624.1	1.5	<DL	<DL	5.0 µg/L	---
Trichloroethylene	✔		1	128,624.1	1.0	<DL	<DL	5.0 µg/L	---
Tetrachloroethylene	✔		1	128,624.1	1.0	<DL	<DL	5.0 µg/L	NA
cis-1,2 Dichloroethylene	✔		1	128,624.1	1.0	<DL	<DL	70 µg/L	---
Vinyl Chloride	✔		1	128,624.1	1.0	<DL	<DL	2.0 µg/L	---
D. Non-Halogenated SVOCs									
Total Phthalates	✔		1	129,625.1	5.0	<DL	<DL	190 µg/L	NA
Diethylhexyl phthalate	✔		1	129,625.1	5.0	<DL	<DL	101 µg/L	NA
Total Group I PAHs	✔		1	129,625.1	5.0	<DL	<DL	1.0 µg/L	---
Benzo(a)anthracene	✔		1	129,625.1	0.1	<DL	<DL	As Total PAHs	NA
Benzo(a)pyrene	✔		1	129,625.1	0.1	<DL	<DL		NA
Benzo(b)fluoranthene	✔		1	129,625.1	0.1	<DL	<DL		NA
Benzo(k)fluoranthene	✔		1	129,625.1	0.1	<DL	<DL		NA
Chrysene	✔		1	129,625.1	0.1	<DL	<DL		NA
Dibenzo(a,h)anthracene	✔		1	129,625.1	0.1	<DL	<DL		NA
Indeno(1,2,3-cd)pyrene	✔		1	129,625.1	0.1	<DL	<DL		NA

Parameter	Known or believed absent	Known or believed present	# of samples	Test method (#)	Detection limit (µg/l)	Influent		Effluent Limitations	
						Daily maximum (µg/l)	Daily average (µg/l)	TBEL	WQBEL
Total Group II PAHs	✔		1	129,625.1	0.1	<DL	<DL	100 µg/L	---
Naphthalene	✔		1	129,625.1	0.1	<DL	<DL	20 µg/L	---
E. Halogenated SVOCs									
Total PCBs	✔		1	107,628.3	0.2	<DL	<DL	0.000064 µg/L	---
Pentachlorophenol	✔		1	107,628.3	1.0	<DL	<DL	1.0 µg/L	---
F. Fuels Parameters									
Total Petroleum Hydrocarbons	✔		1	140,1664B	3600	<DL	<DL	5.0 mg/L	---
Ethanol	✔		1	1671A	20000	<DL	<DL	Report mg/L	---
Methyl-tert-Butyl Ether	✔		1	128,624.1	10	<DL	<DL	70 µg/L	NA
tert-Butyl Alcohol	✔		1	128,624.1	100	<DL	<DL	120 µg/L in MA 40 µg/L in NH	---
tert-Amyl Methyl Ether	✔		1	128,624.1	20	<DL	<DL	90 µg/L in MA 140 µg/L in NH	---
Other (i.e., pH, temperature, hardness, salinity, LC_{50}, additional pollutants present); if so, specify:									
pH - Influent		✔	1	121,4500		7.4			
Hardness - Influent		✔	1	19,200.7		432000			

E. Treatment system information

1. Indicate the type(s) of treatment that will be applied to effluent prior to discharge: (check all that apply)

☐ Adsorption/Absorption ☐ Advanced Oxidation Processes ☐ Air Stripping ☐ Granulated Activated Carbon ("GAC")/Liquid Phase Carbon Adsorption
☐ Ion Exchange ☐ Precipitation/Coagulation/Flocculation ■ Separation/Filtration ☐ Other; if so, specify:

2. Provide a written description of all treatment system(s) or processes that will be applied to the effluent prior to discharge.
Settling tank, bag filters. If necessary to meet discharge limits, pH adjustment or ion media resin vessels will be added as a NOC.

Identify each major treatment component (check any that apply):
■ Fractionation tanks☐ Equalization tank ☐ Oil/water separator ☐ Mechanical filter ☐ Media filter
☐ Chemical feed tank ☐ Air stripping unit ■ Bag filter ☐ Other; if so, specify:

Indicate if either of the following will occur (check any that apply):
☐ Chlorination ☐ De-chlorination

3. Provide the **design flow capacity** in gallons per minute (gpm) of the most limiting component. Indicate the most limiting component: Fractionation tank Is use of a flow meter feasible? (check one): ■ Yes ☐ No, if so, provide justification:	100
Provide the proposed maximum effluent flow in gpm.	50
Provide the average effluent flow in gpm.	25
If Activity Category IV applies, indicate the estimated total volume of water that will be discharged:	N/A

4. Has the operator attached a schematic of flow in accordance with the instructions in E, above? (check one): ■ Yes ☐ No

F. Chemical and additive information

1. Indicate the type(s) of chemical or additive that will be applied to effluent prior to discharge or that may otherwise be present in the discharge(s): (check all that apply)

☐ Algaecides/biocides ☐ Antifoams ☐ Coagulants ☐ Corrosion/scale inhibitors ☐ Disinfectants ☐ Flocculants ☐ Neutralizing agents ☐ Oxidants ☐ Oxygen ☐ scavengers ☐ pH conditioners ☐ Bioremedial agents, including microbes ☐ Chlorine or chemicals containing chlorine ☐ Other; if so, specify:

2. Provide the following information for each chemical/additive, using attachments, if necessary:

a. Product name, chemical formula, and manufacturer of the chemical/additive;
b. Purpose or use of the chemical/additive or remedial agent;
c. Material Safety Data Sheet (MSDS) and Chemical Abstracts Service (CAS) Registry number for each chemical/additive;
d. The frequency (hourly, daily, etc.), duration (hours, days), quantity (maximum and average), and method of application for the chemical/additive;
e. Any material compatibility risks for storage and/or use including the control measures used to minimize such risks; and
f. If available, the vendor's reported aquatic toxicity (NOAEL and/or LC50 in percent for aquatic organism(s)).

3. Has the operator attached an explanation which demonstrates that the addition of such chemicals/additives may be authorized under this general permit in accordance with the instructions in F, above? (check one): ☐ Yes ■ No; if no, has the operator attached data that demonstrates each of the 126 priority pollutants in CWA Section 307(a) and 40 CFR Part 423.15(j)(1) are non-detect in discharges with the addition of the proposed chemical/additive? (check one): ■ Yes ☐ No

G. Endangered Species Act eligibility determination

1. Indicate under which criterion the discharge(s) is eligible for coverage under this general permit:

■ **FWS Criterion A**: No endangered or threatened species or critical habitat are in proximity to the discharges or related activities or come in contact with the "action area".

☐ **FWS Criterion B**: Formal or informal consultation with the FWS under section 7 of the ESA resulted in either a no jeopardy opinion (formal consultation) or a written concurrence by FWS on a finding that the discharges and related activities are "not likely to adversely affect" listed species or critical habitat (informal consultation). Has the operator completed consultation with FWS? (check one): ☐ Yes ☐ No; if no, is consultation underway? (check one): ☐ Yes ☐ No

☐ **FWS Criterion C**: Using the best scientific and commercial data available, the effect of the discharges and related activities on listed species and critical habitat have been evaluated. Based on those evaluations, a determination is made by EPA, or by the operator and affirmed by EPA, that the discharges and related activities will have "no effect" on any federally threatened or endangered listed species or designated critical habitat under the jurisdiction of the FWS. This determination was made by: (check one) ☐ the operator ☐ EPA ☐ Other; if so, specify:

☐ **NMFS Criterion**: A determination made by EPA is affirmed by the operator that the discharges and related activities will have "no effect" or are "not likely to adversely affect" any federally threatened or endangered listed species or critical habitat under the jurisdiction of NMFS and will not result in any take of listed species. Has the operator previously completed consultation with NMFS? (check one): ☐ Yes ■ No

2. Has the operator attached supporting documentation of ESA eligibility in accordance with the instructions in Appendix I, and G, above? (check one): ■ Yes ☐ No

Does the supporting documentation include any written concurrence or finding provided by the Services? (check one): ☐ Yes ■ No; if yes, attach.

H. National Historic Preservation Act eligibility determination

1. Indicate under which criterion the discharge(s) is eligible for coverage under this general permit:

■ **Criterion A**: No historic properties are present. The discharges and discharge-related activities (e.g., BMPs) do not have the potential to cause effects on historic properties.

☐ **Criterion B**: Historic properties are present. Discharges and discharge related activities do not have the potential to cause effects on historic properties.

☐ **Criterion C**: Historic properties are present. The discharges and discharge-related activities have the potential to have an effect or will have an adverse effect on historic properties.

2. Has the operator attached supporting documentation of NHPA eligibility in accordance with the instructions in H, above? (check one): ■ Yes ☐ No

Does the supporting documentation include any written agreement with the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer (TPHO), or other tribal representative that outlines measures the operator will carry out to mitigate or prevent any adverse effects on historic properties? (check one): ☐ Yes ■ No

I. Supplemental information

Describe any supplemental information being provided with the NOI. Include attachments if required or otherwise necessary.

Refer to the attached Report

Has the operator attached data, including any laboratory case narrative and chain of custody used to support the application? (check one): ■ Yes ☐ No

Has the operator attached the certification requirement for the Best Management Practices Plan (BMPP)? (check one): ■ Yes ☐ No

J. Certification requirement

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

BMPP certification statement:	A BMPP Statement has been implemented in accordance with good engineering practices following Part 2.5 of the RGP and shall be implemented upon initiation of discharge.
Notification provided to the appropriate State, including a copy of this NOI, if required.	Check one: Yes ■ No ☐
Notification provided to the municipality in which the discharge is located, including a copy of this NOI, if requested.	Check one: Yes ■ No ☐
Notification provided to the owner of a private or municipal storm sewer system, if such system is used for site discharges, including a copy of this NOI, if requested.	Check one: Yes ■ No ☐ NA ☐
Permission obtained from the owner of a private or municipal storm sewer system, if such system is used for site discharges. If yes, attach additional conditions. If no, attach explanation and timeframe for obtaining permission.	Check one: Yes ☐ No ☐ NA ■
Notification provided to the owner/operator of the area associated with activities covered by an additional discharge permit(s). Additional discharge permit is (check one): ☐ RGP ☐ DGP ☐ CGP ☐ MSGP ☐ Individual NPDES permit ☐ Other; if so, specify:	Check one: Yes ☐ No ☐ NA ■
Signature: DocuSigned by: Vandana Sareen 0E869560C65544F...	Date: 1/21/2022
Print Name and Title: Vandana Sareen	

APPENDIX C:

ADDITIONAL NOI SUPPORT INFORMATION

MassDEP - Bureau of Waste Site Cleanup

Phase 1 Site Assessment Map: 500 feet & 0.5 Mile Radii

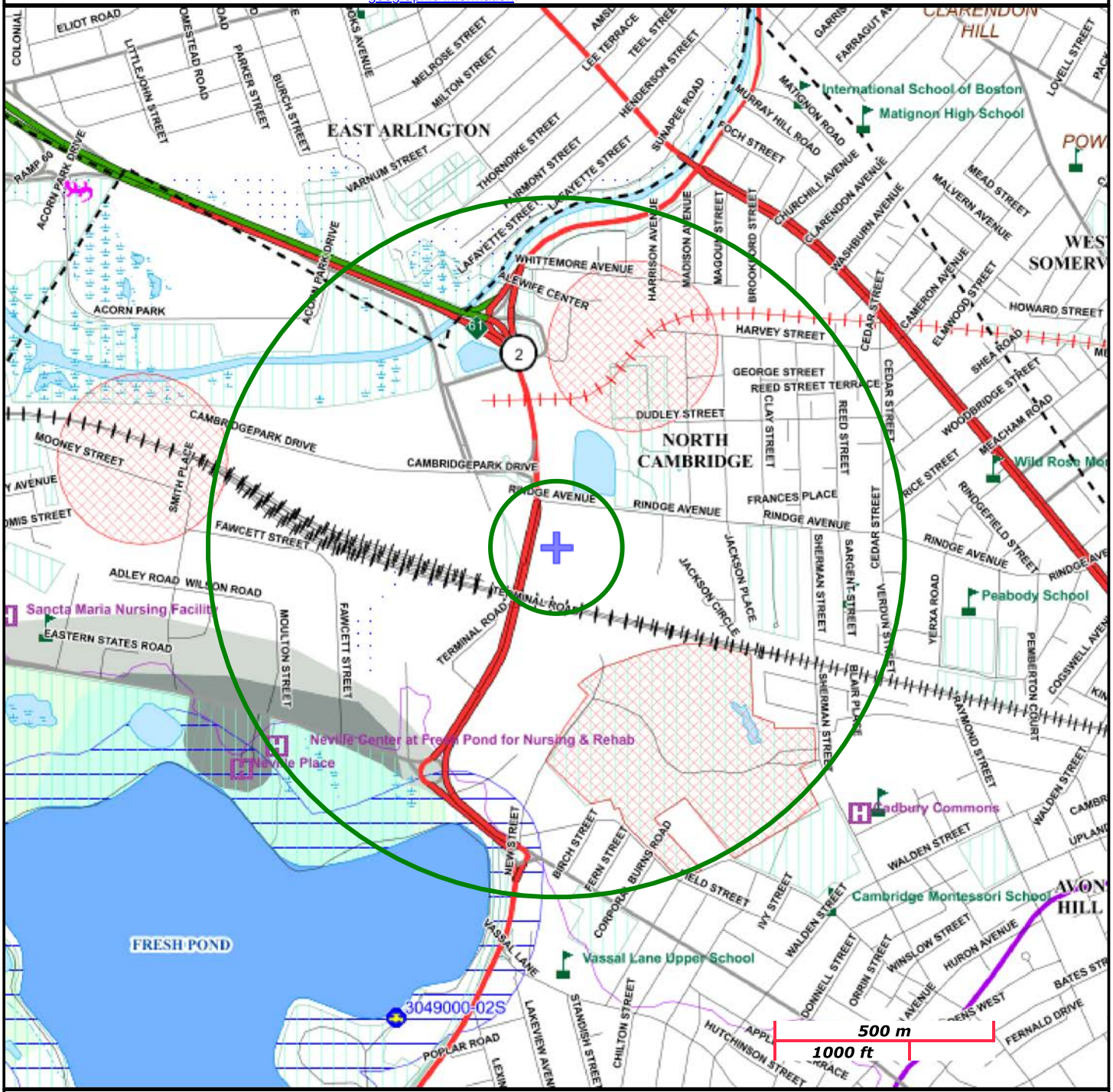
Site Information:

402 RIDGE CAMBRIDGE, MA

NAD83 UTM Meters:
4695639mN , 323863mE (Zone: 19)
January 3, 2022

The information shown is the best available at the date of printing. However, it may be incomplete. The responsible party and LSP are ultimately responsible for ascertaining the true conditions surrounding the site. Metadata for data layers shown on this map can be found at: https://www.mass.gov/orgs/massgis-bureau-of-geographic-information.

MassDEP
Commonwealth of Massachusetts
Department of Environmental Protection



Roads: Limited Access, Divided, Other Hwy, Major Road, Minor Road, Track, Trail

Boundaries: Town, County, DEP Region; Train; Powerline; Pipeline; Aqueduct

Basins: Major, PWS; Streams: Perennial, Intermittent, Man Made Shore, Dam

Aquifers: Medium Yield, High Yield, EPA Sole Source

Non Potential Drinking Water Source Area: Medium, High (Yield)

PWS Protection Areas: Zone II, IWPA, Zone A

Hydrography: Open Water, PWS Reservoir, Tidal Flat

Wetlands: Freshwater, Saltwater, Cranberry Bog

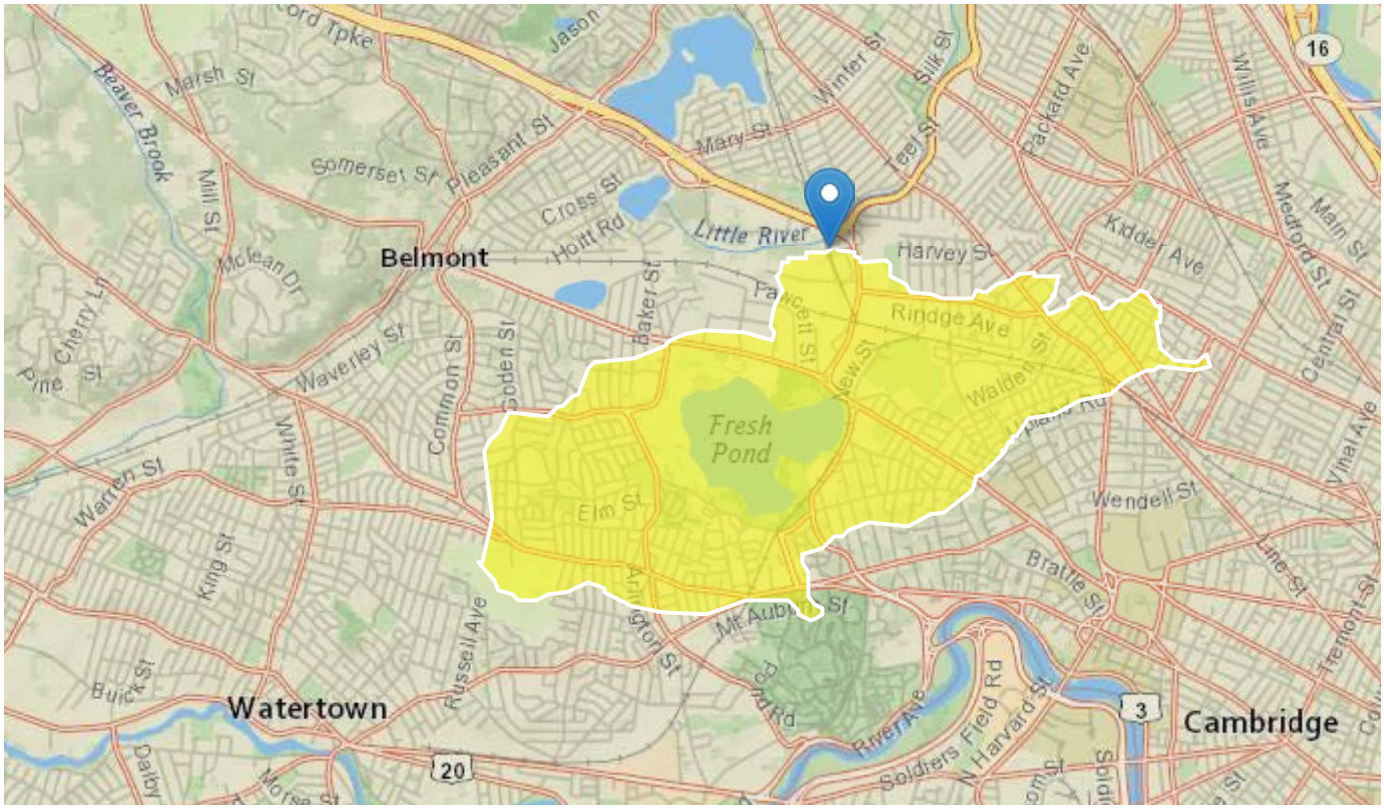
FEMA 100yr Floodplain; Protected Open Space; ACEC

Est. Rare Wetland Wildlife Hab; Vernal Pool: Cert., Potential

Solid Waste Landfill; PWS: Com.GW,SW, Emerg., Non-Com.

StreamStats Report

Region ID: MA
Workspace ID: MA20211223190216880000
Clicked Point (Latitude, Longitude): 42.39668, -71.14313
Time: 2021-12-23 14:02:37 -0500



Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	2.74	square miles
BSLDEM250	Mean basin slope computed from 1:250K DEM	0.832	percent
DRFTPERSTR	Area of stratified drift per unit of stream length	0.55	square mile per mile
MAREGION	Region of Massachusetts 0 for Eastern 1 for Western	0	dimensionless

Low-Flow Statistics Parameters [Statewide Low Flow WRIR00 4135]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	2.74	square miles	1.61	149
BSLDEM250	Mean Basin Slope from 250K DEM	0.832	percent	0.32	24.6
DRFTPERSTR	Stratified Drift per Stream Length	0.55	square mile per mile	0	1.29
MAREGION	Massachusetts Region	0	dimensionless	0	1

Low-Flow Statistics Flow Report [Statewide Low Flow WRIR00 4135]

PIl: Prediction Interval-Lower, PIu: Prediction Interval-Upper, ASEp: Average Standard Error of Prediction, SE: Standard Error (other -- see report)

Statistic	Value	Unit	PIl	PIu	SE	ASEp
7 Day 2 Year Low Flow	0.355	ft^3/s	0.0941	1.29	49.5	49.5
7 Day 10 Year Low Flow	0.142	ft^3/s	0.0303	0.62	70.8	70.8

Low-Flow Statistics Citations

Ries, K.G., III,2000, Methods for estimating low-flow statistics for Massachusetts streams: U.S. Geological Survey Water Resources Investigations Report 00-4135, 81 p. (http://pubs.usgs.gov/wri/wri004135/)

Flow-Duration Statistics Parameters [Statewide Low Flow WRIR00 4135]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	2.74	square miles	1.61	149
DRFTPERSTR	Stratified Drift per Stream Length	0.55	square mile per mile	0	1.29
MAREGION	Massachusetts Region	0	dimensionless	0	1
BSLDEM250	Mean Basin Slope from 250K DEM	0.832	percent	0.32	24.6

Flow-Duration Statistics Flow Report [Statewide Low Flow WRIR00 4135]

PIl: Prediction Interval-Lower, PIu: Prediction Interval-Upper, ASEp: Average Standard Error of Prediction, SE: Standard Error (other -- see report)

Statistic	Value	Unit	PIl	PIu	SE	ASEp
50 Percent Duration	2.67	ft^3/s	1.13	6.27	17.6	17.6
60 Percent Duration	2.09	ft^3/s	0.557	7.79	19.8	19.8
70 Percent Duration	1.53	ft^3/s	0.484	4.79	23.5	23.5
75 Percent Duration	1.26	ft^3/s	0.415	3.78	25.8	25.8
80 Percent Duration	1.06	ft^3/s	0.367	3.02	28.4	28.4
85 Percent Duration	0.75	ft^3/s	0.24	2.31	31.9	31.9
90 Percent Duration	0.594	ft^3/s	0.192	1.8	36.6	36.6
95 Percent Duration	0.316	ft^3/s	0.0859	1.12	45.6	45.6
98 Percent Duration	0.216	ft^3/s	0.0531	0.831	60.3	60.3
99 Percent Duration	0.155	ft^3/s	0.0355	0.637	65.1	65.1

Flow-Duration Statistics Citations

Ries, K.G., III,2000, Methods for estimating low-flow statistics for Massachusetts streams: U.S. Geological Survey Water Resources Investigations Report 00-4135, 81 p. (http://pubs.usgs.gov/wri/wri004135/)

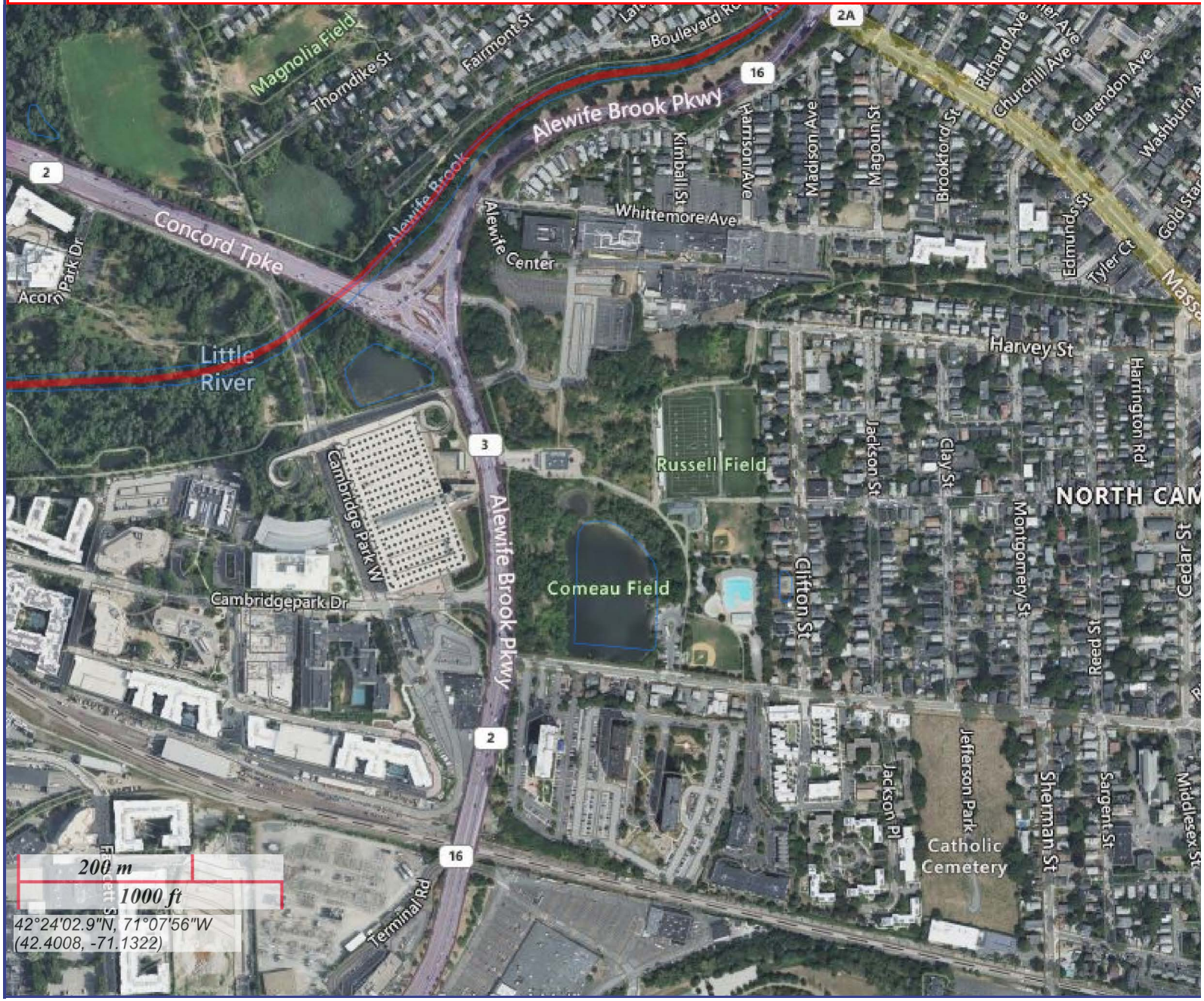
Application Version: 4.6.2
StreamStats Services Version: 1.2.22
NSS Services Version: 2.1.2

MassDEP Online Map Viewer

2014 Integrated List of Waters Map

Helpful Links:

- The Clean Water Act
- MassDEP Total Maximum Daily Loads



Massachusetts Cultural Resource Information System

MACRIS

MACRIS Search Results

Search Criteria: Town(s): Cambridge; Place: Fresh Pond; Street No: 402; Street Name: Rindge Ave; Resource Type(s): Area, Building, Burial Ground, Object, Structure;

Inv. No.	Property Name	Street	Town	Year

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104
http://www.fws.gov/newengland

In Reply Refer To: December 23, 2021
Consultation Code: 05E1NE00-2022-SLI-0953
Event Code: 05E1NE00-2022-E-03369
Project Name: 402 Rindge Ave

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
(603) 223-2541

Project Summary

Consultation Code: 05E1NE00-2022-SLI-0953
Event Code: Some(05E1NE00-2022-E-03369)
Project Name: 402 Rindge Ave
Project Type: DEVELOPMENT
Project Description: RGP
Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@42.39306955,-71.13997433385995,14z

Counties: Middlesex County, Massachusetts

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Category 5 waters listed alphabetically by major watershed
The 303(d) List – "Waters requiring a TMDL"

Water Body	Segment ID	Description	Size	Units	Impairment	EPA TMDL No.
Boston Harbor: Mystic						
Aberjona River	MA71-01	Source just south of Birch Meadow Drive, Reading to inlet Upper Mystic Lake at Mystic Valley Parkway, Winchester (portion culverted underground). (through former pond segments Judkins Pond MA71021 and Mill Pond MA71031).	9.10	Miles	(Physical substrate habitat alterations*)	
					Ammonia, Un-ionized	
					Arsenic	
					Benthic Macroinvertebrates	
					Dissolved Oxygen	
					Escherichia Coli (E. Coli)	
					Phosphorus, Total	
					Sediment Bioassay (Chronic Toxicity Freshwater)	
Alewife Brook	MA71-04	Outlet of Little Pond, Belmont to confluence with Mystic River, Arlington/Somerville (portion in Belmont and Cambridge identified as Little River with name changing to Alewife Brook at Arlington corporate boundary).	2.30	Miles	(Debris*)	
					(Trash*)	
					Copper	
					Dissolved Oxygen	
					Escherichia Coli (E. Coli)	
					Flocculant Masses	
					Lead	
					Odor	
					Oil And Grease	
					PCBs In Fish Tissue	
					Phosphorus, Total	
					Scum/Foam	
					Sediment Bioassay (Chronic Toxicity Freshwater)	
					Transparency / Clarity	
Belle Isle Inlet	MA71-14	From tidegate at Bennington Street, Boston/Revere to confluence with Winthrop Bay, Boston/Winthrop.	0.12	Square Miles	Cause Unknown (Contaminants in Fish and/or Shellfish)	
					Fecal Coliform	
					PCBs In Fish Tissue	
Blacks Nook	MA71005	Cambridge.	2.00	Acres	(Non-Native Aquatic Plants*)	
					Nutrient/Eutrophication Biological Indicators	
					Transparency / Clarity	

APPENDIX D:

LABORATORY ANALYTICAL DATA - GROUNDWATER

ANALYTICAL REPORT

Lab Number:	L2166691
Client:	McPhail Associates 2269 Massachusetts Avenue Cambridge, MA 02140
ATTN:	Ambrose Donovan
Phone:	(617) 868-1420
Project Name:	402 RINDGE AVENUE
Project Number:	6804.9.A4
Report Date:	12/21/21

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: 402 RINDGE AVENUE
Project Number: 6804.9.A4

Lab Number: L2166691
Report Date: 12/21/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2166691-01	GP-10 (OW)	WATER	CAMBRIDGE, MA	12/03/21 12:30	12/03/21

Project Name:	402 RINDGE AVENUE	**Lab Number:**	L2166691
Project Number:	6804.9.A4	**Report Date:**	12/21/21

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	402 RINDGE AVENUE	**Lab Number:**	L2166691
Project Number:	6804.9.A4	**Report Date:**	12/21/21

Case Narrative (continued)

Report Revision

December 21, 2021: This report includes the results of the Hardness analysis.

Report Submission

December 13, 2021: This final report includes the results of all requested analyses.

December 10, 2021: This is a preliminary report.

The analysis of Ethanol was subcontracted. A copy of the laboratory report is included as an addendum.

Please note: This data is only available in PDF format and is not available on Data Merger.

Chlorine, Total Residual

The WG1579059-4 MS recovery, performed on L2166691-01, is outside the acceptance criteria for chlorine, total residual (0%); however, the associated LCS recovery is within criteria. No further action was taken.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Cristin Walker

Title: Technical Director/Representative Date: 12/21/21

ORGANICS

VOLATILES

Project Name: 402 RINDGE AVENUE
Lab Number: L2166691
Project Number: 6804.9.A4
Report Date: 12/21/21

SAMPLE RESULTS

Lab ID: L2166691-01
Client ID: GP-10 (OW)
Sample Location: CAMBRIDGE, MA

Date Collected: 12/03/21 12:30
Date Received: 12/03/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 12/05/21 20:52
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	1.0	--	1
1,1-Dichloroethane	ND		ug/l	1.5	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.5	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
1,2-Dichloroethane	ND		ug/l	1.5	--	1
1,1,1-Trichloroethane	ND		ug/l	2.0	--	1
Benzene	ND		ug/l	1.0	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	5.0	--	1
1,3-Dichlorobenzene	ND		ug/l	5.0	--	1
1,4-Dichlorobenzene	ND		ug/l	5.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
Acetone	ND		ug/l	10	--	1
Methyl tert butyl ether	ND		ug/l	10	--	1
Tert-Butyl Alcohol	ND		ug/l	100	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	20	--	1

Project Name: 402 RINDGE AVENUE **Lab Number:** L2166691

Project Number: 6804.9.A4 **Report Date:** 12/21/21

SAMPLE RESULTS

Lab ID: L2166691-01 Date Collected: 12/03/21 12:30

Client ID: GP-10 (OW) Date Received: 12/03/21

Sample Location: CAMBRIDGE, MA Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	91		60-140
Fluorobenzene	108		60-140
4-Bromofluorobenzene	97		60-140

Project Name: 402 RINDGE AVENUE
Lab Number: L2166691
Project Number: 6804.9.A4
Report Date: 12/21/21

SAMPLE RESULTS

Lab ID: L2166691-01
Client ID: GP-10 (OW)
Sample Location: CAMBRIDGE, MA

Date Collected: 12/03/21 12:30
Date Received: 12/03/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 128,624.1-SIM
Analytical Date: 12/05/21 20:52
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-SIM - Westborough Lab						
1,4-Dioxane	ND		ug/l	5.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Fluorobenzene	111		60-140
4-Bromofluorobenzene	97		60-140

Project Name: 402 RINDGE AVENUE
Lab Number: L2166691
Project Number: 6804.9.A4
Report Date: 12/21/21

SAMPLE RESULTS

Lab ID: L2166691-01
Client ID: GP-10 (OW)
Sample Location: CAMBRIDGE, MA

Date Collected: 12/03/21 12:30
Date Received: 12/03/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 14,504.1
Analytical Date: 12/07/21 14:11
Analyst: AMM

Extraction Method: EPA 504.1
Extraction Date: 12/07/21 11:11

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	--	1	A

Project Name: 402 RINDGE AVENUE **Lab Number:** L2166691

Project Number: 6804.9.A4 **Report Date:** 12/21/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 128,624.1
Analytical Date: 12/05/21 11:51
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1579611-4					
Methylene chloride	ND		ug/l	1.0	--
1,1-Dichloroethane	ND		ug/l	1.5	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.5	--
Tetrachloroethene	ND		ug/l	1.0	--
1,2-Dichloroethane	ND		ug/l	1.5	--
1,1,1-Trichloroethane	ND		ug/l	2.0	--
Benzene	ND		ug/l	1.0	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Vinyl chloride	ND		ug/l	1.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--
Trichloroethene	ND		ug/l	1.0	--
1,2-Dichlorobenzene	ND		ug/l	5.0	--
1,3-Dichlorobenzene	ND		ug/l	5.0	--
1,4-Dichlorobenzene	ND		ug/l	5.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
Acetone	ND		ug/l	10	--
Methyl tert butyl ether	ND		ug/l	10	--
Tert-Butyl Alcohol	ND		ug/l	100	--
Tertiary-Amyl Methyl Ether	ND		ug/l	20	--

Project Name: 402 RINDGE AVENUE **Lab Number:** L2166691

Project Number: 6804.9.A4 **Report Date:** 12/21/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 128,624.1
Analytical Date: 12/05/21 11:51
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1579611-4					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	95		60-140
Fluorobenzene	106		60-140
4-Bromofluorobenzene	96		60-140

Project Name: 402 RINDGE AVENUE **Lab Number:** L2166691

Project Number: 6804.9.A4 **Report Date:** 12/21/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 128,624.1-SIM
Analytical Date: 12/05/21 13:39
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1579621-4					
1,4-Dioxane	ND		ug/l	5.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Fluorobenzene	109		60-140
4-Bromofluorobenzene	102		60-140

Project Name: 402 RINDGE AVENUE
Project Number: 6804.9.A4
Lab Number: L2166691
Report Date: 12/21/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 14,504.1
Analytical Date: 12/07/21 12:47
Analyst: AMM

Extraction Method: EPA 504.1
Extraction Date: 12/07/21 11:11

Parameter	Result	Qualifier	Units	RL	MDL	
Microextractables by GC - Westborough Lab for sample(s): 01 Batch: WG1580083-1						
1,2-Dibromoethane	ND		ug/l	0.010	--	A

Lab Control Sample Analysis
Batch Quality Control

Project Name: 402 RINDGE AVENUE
Project Number: 6804.9.A4

Lab Number: L2166691
Report Date: 12/21/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1579611-3								
Methylene chloride	90		-		60-140	-		28
1,1-Dichloroethane	90		-		50-150	-		49
Carbon tetrachloride	95		-		70-130	-		41
1,1,2-Trichloroethane	95		-		70-130	-		45
Tetrachloroethene	90		-		70-130	-		39
1,2-Dichloroethane	90		-		70-130	-		49
1,1,1-Trichloroethane	90		-		70-130	-		36
Benzene	100		-		65-135	-		61
Toluene	100		-		70-130	-		41
Ethylbenzene	100		-		60-140	-		63
Vinyl chloride	80		-		5-195	-		66
1,1-Dichloroethene	85		-		50-150	-		32
cis-1,2-Dichloroethene	95		-		60-140	-		30
Trichloroethene	100		-		65-135	-		48
1,2-Dichlorobenzene	100		-		65-135	-		57
1,3-Dichlorobenzene	95		-		70-130	-		43
1,4-Dichlorobenzene	95		-		65-135	-		57
p/m-Xylene	98		-		60-140	-		30
o-xylene	90		-		60-140	-		30
Acetone	94		-		40-160	-		30
Methyl tert butyl ether	85		-		60-140	-		30
Tert-Butyl Alcohol	88		-		60-140	-		30
Tertiary-Amyl Methyl Ether	80		-		60-140	-		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 402 RINDGE AVENUE
Project Number: 6804.9.A4

Lab Number: L2166691
Report Date: 12/21/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1579611-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Pentafluorobenzene	95				60-140
Fluorobenzene	108				60-140
4-Bromofluorobenzene	98				60-140

Lab Control Sample Analysis
Batch Quality Control

Project Name: 402 RINDGE AVENUE
Project Number: 6804.9.A4

Lab Number: L2166691
Report Date: 12/21/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG1579621-3								
1,4-Dioxane	100		-		60-140	-		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Fluorobenzene	113				60-140
4-Bromofluorobenzene	101				60-140

Lab Control Sample Analysis

Batch Quality Control

Project Name: 402 RINDGE AVENUE

Project Number: 6804.9.A4

Lab Number: L2166691

Report Date: 12/21/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Microextractables by GC - Westborough Lab	Associated sample(s): 01		Batch: WG1580083-2						
1,2-Dibromoethane	89		-		80-120	-			A

Matrix Spike Analysis

Batch Quality Control

Project Name: 402 RINDGE AVENUE

Project Number: 6804.9.A4

Lab Number: L2166691

Report Date: 12/21/21

Parameter	*Native Sample*	*MS Added*	*MS Found*	*MS %Recovery*	*Qual*	*MSD Found*	*MSD %Recovery*	*Qual*	*Recovery Limits*	*RPD*	*Qual*	*RPD Limits*	*Column*
Microextractables by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1580083-3 QC Sample: L2165897-02 Client ID: MS Sample													
1,2-Dibromoethane	ND	0.245	0.225	92		-	-		80-120	-		20	A
1,2-Dibromo-3-chloropropane	ND	0.245	0.214	87		-	-		80-120	-		20	A
1,2,3-Trichloropropane	ND	0.245	0.267	109		-	-		80-120	-		20	A

SEMIVOLATILES

Project Name: 402 RINDGE AVENUE
Lab Number: L2166691
Project Number: 6804.9.A4
Report Date: 12/21/21

SAMPLE RESULTS

Lab ID: L2166691-01
Client ID: GP-10 (OW)
Sample Location: CAMBRIDGE, MA

Date Collected: 12/03/21 12:30
Date Received: 12/03/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 129,625.1
Analytical Date: 12/06/21 17:37
Analyst: SZ

Extraction Method: EPA 625.1
Extraction Date: 12/04/21 14:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-ethylhexyl)phthalate	ND		ug/l	2.20	--	1
Butyl benzyl phthalate	ND		ug/l	5.00	--	1
Di-n-butylphthalate	ND		ug/l	5.00	--	1
Di-n-octylphthalate	ND		ug/l	5.00	--	1
Diethyl phthalate	ND		ug/l	5.00	--	1
Dimethyl phthalate	ND		ug/l	5.00	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	68		42-122
2-Fluorobiphenyl	64		46-121
4-Terphenyl-d14	75		47-138

Project Name: 402 RINDGE AVENUE
Lab Number: L2166691
Project Number: 6804.9.A4
Report Date: 12/21/21

SAMPLE RESULTS

Lab ID: L2166691-01
Client ID: GP-10 (OW)
Sample Location: CAMBRIDGE, MA

Date Collected: 12/03/21 12:30
Date Received: 12/03/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 129,625.1-SIM
Analytical Date: 12/05/21 14:35
Analyst: DV

Extraction Method: EPA 625.1
Extraction Date: 12/04/21 14:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.180		ug/l	0.100	--	1
Fluoranthene	0.102		ug/l	0.100	--	1
Naphthalene	ND		ug/l	0.100	--	1
Benzo(a)anthracene	ND		ug/l	0.100	--	1
Benzo(a)pyrene	ND		ug/l	0.100	--	1
Benzo(b)fluoranthene	ND		ug/l	0.100	--	1
Benzo(k)fluoranthene	ND		ug/l	0.100	--	1
Chrysene	ND		ug/l	0.100	--	1
Acenaphthylene	ND		ug/l	0.100	--	1
Anthracene	ND		ug/l	0.100	--	1
Benzo(ghi)perylene	ND		ug/l	0.100	--	1
Fluorene	ND		ug/l	0.100	--	1
Phenanthrene	0.126		ug/l	0.100	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.100	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.100	--	1
Pyrene	ND		ug/l	0.100	--	1
Pentachlorophenol	ND		ug/l	1.00	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	34		25-87
Phenol-d6	25		16-65
Nitrobenzene-d5	60		42-122
2-Fluorobiphenyl	60		46-121
2,4,6-Tribromophenol	87		45-128
4-Terphenyl-d14	59		47-138

Project Name: 402 RINDGE AVENUE
Project Number: 6804.9.A4
Lab Number: L2166691
Report Date: 12/21/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 129,625.1
Analytical Date: 12/06/21 13:22
Analyst: SZ

Extraction Method: EPA 625.1
Extraction Date: 12/04/21 07:52

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1579070-1					
Bis(2-ethylhexyl)phthalate	ND		ug/l	2.20	--
Butyl benzyl phthalate	ND		ug/l	5.00	--
Di-n-butylphthalate	ND		ug/l	5.00	--
Di-n-octylphthalate	ND		ug/l	5.00	--
Diethyl phthalate	ND		ug/l	5.00	--
Dimethyl phthalate	ND		ug/l	5.00	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	96		42-122
2-Fluorobiphenyl	90		46-121
4-Terphenyl-d14	103		47-138

Project Name: 402 RINDGE AVENUE
Project Number: 6804.9.A4
Lab Number: L2166691
Report Date: 12/21/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 129,625.1-SIM
Analytical Date: 12/05/21 14:19
Analyst: DV

Extraction Method: EPA 625.1
Extraction Date: 12/04/21 07:51

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1579076-1					
Acenaphthene	ND		ug/l	0.100	--
Fluoranthene	ND		ug/l	0.100	--
Naphthalene	ND		ug/l	0.100	--
Benzo(a)anthracene	ND		ug/l	0.100	--
Benzo(a)pyrene	ND		ug/l	0.100	--
Benzo(b)fluoranthene	ND		ug/l	0.100	--
Benzo(k)fluoranthene	ND		ug/l	0.100	--
Chrysene	ND		ug/l	0.100	--
Acenaphthylene	ND		ug/l	0.100	--
Anthracene	ND		ug/l	0.100	--
Benzo(ghi)perylene	ND		ug/l	0.100	--
Fluorene	ND		ug/l	0.100	--
Phenanthrene	ND		ug/l	0.100	--
Dibenzo(a,h)anthracene	ND		ug/l	0.100	--
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.100	--
Pyrene	ND		ug/l	0.100	--
Pentachlorophenol	ND		ug/l	1.00	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	50		25-87
Phenol-d6	35		16-65
Nitrobenzene-d5	86		42-122
2-Fluorobiphenyl	83		46-121
2,4,6-Tribromophenol	106		45-128
4-Terphenyl-d14	87		47-138

Lab Control Sample Analysis
Batch Quality Control

Project Name: 402 RINDGE AVENUE
Project Number: 6804.9.A4

Lab Number: L2166691
Report Date: 12/21/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1579070-2								
Bis(2-ethylhexyl)phthalate	93		-		29-137	-		82
Butyl benzyl phthalate	81		-		1-140	-		60
Di-n-butylphthalate	85		-		8-120	-		47
Di-n-octylphthalate	88		-		19-132	-		69
Diethyl phthalate	80		-		1-120	-		100
Dimethyl phthalate	75		-		1-120	-		183

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Nitrobenzene-d5	68				42-122
2-Fluorobiphenyl	68				46-121
4-Terphenyl-d14	79				47-138

Lab Control Sample Analysis
Batch Quality Control

Project Name: 402 RINDGE AVENUE
Project Number: 6804.9.A4

Lab Number: L2166691
Report Date: 12/21/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG1579076-3								
Acenaphthene	75		-		60-132	-		30
Fluoranthene	87		-		43-121	-		30
Naphthalene	74		-		36-120	-		30
Benzo(a)anthracene	79		-		42-133	-		30
Benzo(a)pyrene	81		-		32-148	-		30
Benzo(b)fluoranthene	83		-		42-140	-		30
Benzo(k)fluoranthene	82		-		25-146	-		30
Chrysene	72		-		44-140	-		30
Acenaphthylene	88		-		54-126	-		30
Anthracene	79		-		43-120	-		30
Benzo(ghi)perylene	81		-		1-195	-		30
Fluorene	82		-		70-120	-		30
Phenanthrene	75		-		65-120	-		30
Dibenzo(a,h)anthracene	89		-		1-200	-		30
Indeno(1,2,3-cd)pyrene	82		-		1-151	-		30
Pyrene	84		-		70-120	-		30
Pentachlorophenol	71		-		38-152	-		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 402 RINDGE AVENUE
Project Number: 6804.9.A4

Lab Number: L2166691
Report Date: 12/21/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG1579076-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	45				25-87
Phenol-d6	34				16-65
Nitrobenzene-d5	77				42-122
2-Fluorobiphenyl	76				46-121
2,4,6-Tribromophenol	110				45-128
4-Terphenyl-d14	78				47-138

PCBS

Project Name: 402 RINDGE AVENUE
Lab Number: L2166691
Project Number: 6804.9.A4
Report Date: 12/21/21

SAMPLE RESULTS

Lab ID: L2166691-01
Client ID: GP-10 (OW)
Sample Location: CAMBRIDGE, MA

Date Collected: 12/03/21 12:30
Date Received: 12/03/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 127,608.3
Analytical Date: 12/05/21 21:08
Analyst: JM

Extraction Method: EPA 608.3
Extraction Date: 12/04/21 22:46
Cleanup Method: EPA 3665A
Cleanup Date: 12/05/21
Cleanup Method: EPA 3660B
Cleanup Date: 12/05/21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.250	--	1	A
Aroclor 1221	ND		ug/l	0.250	--	1	A
Aroclor 1232	ND		ug/l	0.250	--	1	A
Aroclor 1242	ND		ug/l	0.250	--	1	A
Aroclor 1248	ND		ug/l	0.250	--	1	A
Aroclor 1254	ND		ug/l	0.250	--	1	A
Aroclor 1260	ND		ug/l	0.200	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	61		37-123	B
Decachlorobiphenyl	55		38-114	B
2,4,5,6-Tetrachloro-m-xylene	57		37-123	A
Decachlorobiphenyl	54		38-114	A

Project Name: 402 RINDGE AVENUE
Project Number: 6804.9.A4

Lab Number: L2166691
Report Date: 12/21/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 127,608.3
Analytical Date: 12/05/21 19:45
Analyst: JM

Extraction Method: EPA 608.3
Extraction Date: 12/04/21 22:46
Cleanup Method: EPA 3665A
Cleanup Date: 12/05/21
Cleanup Method: EPA 3660B
Cleanup Date: 12/05/21

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG1579232-1						
Aroclor 1016	ND		ug/l	0.250	--	A
Aroclor 1221	ND		ug/l	0.250	--	A
Aroclor 1232	ND		ug/l	0.250	--	A
Aroclor 1242	ND		ug/l	0.250	--	A
Aroclor 1248	ND		ug/l	0.250	--	A
Aroclor 1254	ND		ug/l	0.250	--	A
Aroclor 1260	ND		ug/l	0.200	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		37-123	B
Decachlorobiphenyl	71		38-114	B
2,4,5,6-Tetrachloro-m-xylene	63		37-123	A
Decachlorobiphenyl	69		38-114	A

Lab Control Sample Analysis
Batch Quality Control

Project Name: 402 RINDGE AVENUE
Project Number: 6804.9.A4

Lab Number: L2166691
Report Date: 12/21/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG1579232-2									
Aroclor 1016	67		-		50-140	-		36	A
Aroclor 1260	67		-		8-140	-		38	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	63				37-123	B
Decachlorobiphenyl	70				38-114	B
2,4,5,6-Tetrachloro-m-xylene	61				37-123	A
Decachlorobiphenyl	70				38-114	A

METALS

Project Name: 402 RINDGE AVENUE
Lab Number: L2166691
Project Number: 6804.9.A4
Report Date: 12/21/21

SAMPLE RESULTS

Lab ID: L2166691-01
Client ID: GP-10 (OW)
Sample Location: CAMBRIDGE, MA
Date Collected: 12/03/21 12:30
Date Received: 12/03/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	ND		mg/l	0.00400	--	1	12/06/21 14:26	12/07/21 17:52	EPA 3005A	3,200.8	PS
Arsenic, Total	0.00118		mg/l	0.00100	--	1	12/06/21 14:26	12/07/21 17:52	EPA 3005A	3,200.8	PS
Cadmium, Total	ND		mg/l	0.00020	--	1	12/06/21 14:26	12/07/21 17:52	EPA 3005A	3,200.8	PS
Chromium, Total	0.00131		mg/l	0.00100	--	1	12/06/21 14:26	12/07/21 17:52	EPA 3005A	3,200.8	PS
Copper, Total	0.00143		mg/l	0.00100	--	1	12/06/21 14:26	12/07/21 17:52	EPA 3005A	3,200.8	PS
Iron, Total	8.39		mg/l	0.050	--	1	12/06/21 14:26	12/09/21 10:44	EPA 3005A	19,200.7	EW
Lead, Total	0.00443		mg/l	0.00100	--	1	12/06/21 14:26	12/07/21 17:52	EPA 3005A	3,200.8	PS
Mercury, Total	ND		mg/l	0.00020	--	1	12/07/21 14:57	12/08/21 07:53	EPA 245.1	3,245.1	AC
Nickel, Total	0.00406		mg/l	0.00200	--	1	12/06/21 14:26	12/07/21 17:52	EPA 3005A	3,200.8	PS
Selenium, Total	ND		mg/l	0.00500	--	1	12/06/21 14:26	12/07/21 17:52	EPA 3005A	3,200.8	PS
Silver, Total	ND		mg/l	0.00040	--	1	12/06/21 14:26	12/07/21 17:52	EPA 3005A	3,200.8	PS
Zinc, Total	0.02704		mg/l	0.01000	--	1	12/06/21 14:26	12/07/21 17:52	EPA 3005A	3,200.8	PS
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	432		mg/l	0.660	NA	1	12/06/21 14:26	12/09/21 10:44	EPA 3005A	19,200.7	EW
General Chemistry - Mansfield Lab											
Chromium, Trivalent	ND		mg/l	0.010	--	1		12/07/21 17:52	NA	107,-	

Project Name: 402 RINDGE AVENUE **Lab Number:** L2166691

Project Number: 6804.9.A4 **Report Date:** 12/21/21

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1579660-1										
Iron, Total	ND		mg/l	0.050	--	1	12/06/21 14:26	12/08/21 23:25	19,200.7	MC

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Hardness by SM 2340B - Mansfield Lab for sample(s): 01 Batch: WG1579660-1										
Hardness	ND		mg/l	0.660	NA	1	12/06/21 14:26	12/08/21 23:25	19,200.7	MC

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1579662-1										
Antimony, Total	ND		mg/l	0.00400	--	1	12/06/21 14:26	12/07/21 16:44	3,200.8	PS
Arsenic, Total	ND		mg/l	0.00100	--	1	12/06/21 14:26	12/07/21 16:44	3,200.8	PS
Cadmium, Total	ND		mg/l	0.00020	--	1	12/06/21 14:26	12/07/21 16:44	3,200.8	PS
Chromium, Total	ND		mg/l	0.00100	--	1	12/06/21 14:26	12/07/21 16:44	3,200.8	PS
Copper, Total	ND		mg/l	0.00100	--	1	12/06/21 14:26	12/07/21 16:44	3,200.8	PS
Lead, Total	ND		mg/l	0.00100	--	1	12/06/21 14:26	12/07/21 16:44	3,200.8	PS
Nickel, Total	ND		mg/l	0.00200	--	1	12/06/21 14:26	12/07/21 16:44	3,200.8	PS
Selenium, Total	ND		mg/l	0.00500	--	1	12/06/21 14:26	12/07/21 16:44	3,200.8	PS
Silver, Total	ND		mg/l	0.00040	--	1	12/06/21 14:26	12/07/21 16:44	3,200.8	PS
Zinc, Total	ND		mg/l	0.01000	--	1	12/06/21 14:26	12/07/21 16:44	3,200.8	PS

Prep Information

Digestion Method: EPA 3005A

Project Name: 402 RINDGE AVENUE
Project Number: 6804.9.A4
Lab Number: L2166691
Report Date: 12/21/21

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1580121-1										
Mercury, Total	ND		mg/l	0.00020	--	1	12/07/21 14:57	12/08/21 07:33	3,245.1	AC

Prep Information

Digestion Method: EPA 245.1

Lab Control Sample Analysis

Batch Quality Control

Project Name: 402 RINDGE AVENUE

Project Number: 6804.9.A4

Lab Number: L2166691

Report Date: 12/21/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1579660-2								
Iron, Total	92		-		85-115	-		
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01 Batch: WG1579660-2								
Hardness	104		-		85-115	-		
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1579662-2								
Antimony, Total	87		-		85-115	-		
Arsenic, Total	98		-		85-115	-		
Cadmium, Total	100		-		85-115	-		
Chromium, Total	104		-		85-115	-		
Copper, Total	100		-		85-115	-		
Lead, Total	97		-		85-115	-		
Nickel, Total	98		-		85-115	-		
Selenium, Total	101		-		85-115	-		
Silver, Total	102		-		85-115	-		
Zinc, Total	100		-		85-115	-		
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1580121-2								
Mercury, Total	93		-		85-115	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: 402 RINDGE AVENUE
Project Number: 6804.9.A4

Lab Number: L2166691
Report Date: 12/21/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1579660-3 QC Sample: L2166579-01 Client ID: MS Sample												
Iron, Total	0.051	1	0.954	90		-	-		75-125	-		20
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1579660-3 QC Sample: L2166579-01 Client ID: MS Sample												
Hardness	132	66.2	195	95		-	-		75-125	-		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1579662-3 QC Sample: L2166579-01 Client ID: MS Sample												
Antimony, Total	ND	0.5	0.4365	87		-	-		70-130	-		20
Arsenic, Total	0.00143	0.12	0.1220	100		-	-		70-130	-		20
Cadmium, Total	0.00036	0.053	0.05526	104		-	-		70-130	-		20
Chromium, Total	ND	0.2	0.2025	101		-	-		70-130	-		20
Copper, Total	0.00183	0.25	0.2562	102		-	-		70-130	-		20
Lead, Total	ND	0.53	0.5514	104		-	-		70-130	-		20
Nickel, Total	0.01718	0.5	0.4951	96		-	-		70-130	-		20
Selenium, Total	ND	0.12	0.1186	99		-	-		70-130	-		20
Silver, Total	ND	0.05	0.05000	100		-	-		70-130	-		20
Zinc, Total	0.03377	0.5	0.5313	100		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: 402 RINDGE AVENUE
Project Number: 6804.9.A4

Lab Number: L2166691
Report Date: 12/21/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1579662-5 QC Sample: L2166691-01 Client ID: GP-10 (OW)									
Antimony, Total	ND	0.5	0.5334	107	-	-	70-130	-	20
Arsenic, Total	0.00118	0.12	0.1200	99	-	-	70-130	-	20
Cadmium, Total	ND	0.053	0.05323	100	-	-	70-130	-	20
Chromium, Total	0.00131	0.2	0.2054	102	-	-	70-130	-	20
Copper, Total	0.00143	0.25	0.2514	100	-	-	70-130	-	20
Lead, Total	0.00443	0.53	0.5576	104	-	-	70-130	-	20
Nickel, Total	0.00406	0.5	0.4850	96	-	-	70-130	-	20
Selenium, Total	ND	0.12	0.1176	98	-	-	70-130	-	20
Silver, Total	ND	0.05	0.05021	100	-	-	70-130	-	20
Zinc, Total	0.02704	0.5	0.5190	98	-	-	70-130	-	20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1580121-3 QC Sample: L2166864-02 Client ID: MS Sample									
Mercury, Total	ND	0.005	0.00439	88	-	-	70-130	-	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 402 RINDGE AVENUE
Project Number: 6804.9.A4

Lab Number: L2166691
Report Date: 12/21/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1579660-4 QC Sample: L2166579-01 Client ID: DUP Sample						
Iron, Total	0.051	0.054	mg/l	6		20
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1579660-4 QC Sample: L2166579-01 Client ID: DUP Sample						
Hardness	132	134	mg/l	2		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1579662-4 QC Sample: L2166579-01 Client ID: DUP Sample						
Antimony, Total	ND	ND	mg/l	NC		20
Arsenic, Total	0.00143	0.00138	mg/l	3		20
Cadmium, Total	0.00036	0.00039	mg/l	6		20
Chromium, Total	ND	ND	mg/l	NC		20
Copper, Total	0.00183	0.00177	mg/l	3		20
Lead, Total	ND	ND	mg/l	NC		20
Nickel, Total	0.01718	0.01757	mg/l	2		20
Selenium, Total	ND	ND	mg/l	NC		20
Silver, Total	ND	ND	mg/l	NC		20
Zinc, Total	0.03377	0.03449	mg/l	2		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 402 RINDGE AVENUE
Project Number: 6804.9.A4

Lab Number: L2166691
Report Date: 12/21/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1579662-6 QC Sample: L2166691-01 Client ID: GP-10 (OW)					
Antimony, Total	ND	ND	mg/l	NC	20
Arsenic, Total	0.00118	0.00117	mg/l	0	20
Cadmium, Total	ND	ND	mg/l	NC	20
Chromium, Total	0.00131	0.00148	mg/l	12	20
Copper, Total	0.00143	0.00157	mg/l	9	20
Lead, Total	0.00443	0.00449	mg/l	1	20
Nickel, Total	0.00406	0.00447	mg/l	10	20
Selenium, Total	ND	ND	mg/l	NC	20
Silver, Total	ND	ND	mg/l	NC	20
Zinc, Total	0.02704	0.02671	mg/l	1	20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1580121-4 QC Sample: L2166864-02 Client ID: DUP Sample					
Mercury, Total	ND	ND	mg/l	NC	20

INORGANICS
&
MISCELLANEOUS

Project Name: 402 RINDGE AVENUE
Project Number: 6804.9.A4

Lab Number: L2166691
Report Date: 12/21/21

SAMPLE RESULTS

Lab ID: L2166691-01
Client ID: GP-10 (OW)
Sample Location: CAMBRIDGE, MA

Date Collected: 12/03/21 12:30
Date Received: 12/03/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	90.		mg/l	5.0	NA	1	-	12/06/21 11:00	121,2540D	MD
Cyanide, Total	ND		mg/l	0.005	--	1	12/08/21 05:50	12/08/21 11:30	121,4500CN-CE	CS
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	12/04/21 07:02	121,4500CL-D	KA
pH (H)	7.4		SU	-	NA	1	-	12/06/21 20:55	121,4500H+-B	AS
Nitrogen, Ammonia	10.7		mg/l	0.075	--	1	12/08/21 15:29	12/08/21 21:00	121,4500NH3-BH	AT
TPH, SGT-HEM	ND		mg/l	3.60	--	.9	12/06/21 14:00	12/06/21 15:00	140,1664B	NP
Phenolics, Total	ND		mg/l	0.030	--	1	12/06/21 07:33	12/06/21 10:30	4,420.1	KP
Chromium, Hexavalent	ND		mg/l	0.010	--	1	12/04/21 08:50	12/04/21 09:03	1,7196A	KA
Anions by Ion Chromatography - Westborough Lab										
Chloride	508.		mg/l	25.0	--	50	-	12/09/21 17:52	44,300.0	JT

Project Name: 402 RINDGE AVENUE **Lab Number:** L2166691

Project Number: 6804.9.A4 **Report Date:** 12/21/21

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1579059-1										
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	12/04/21 07:02	121,4500CL-D	KA
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1579069-1										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	12/04/21 08:50	12/04/21 09:02	1,7196A	KA
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1579462-1										
Phenolics, Total	ND		mg/l	0.030	--	1	12/06/21 07:33	12/06/21 10:23	4,420.1	KP
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1579541-1										
TPH, SGT-HEM	ND		mg/l	4.00	--	1	12/06/21 14:00	12/06/21 15:00	140,1664B	NP
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1579569-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	12/06/21 11:00	121,2540D	MD
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1580414-1										
Cyanide, Total	ND		mg/l	0.005	--	1	12/08/21 05:50	12/08/21 11:11	121,4500CN-CE	CS
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1580539-1										
Nitrogen, Ammonia	ND		mg/l	0.075	--	1	12/08/21 15:29	12/08/21 20:44	121,4500NH3-BH	AT
Anions by Ion Chromatography - Westborough Lab for sample(s): 01 Batch: WG1581380-1										
Chloride	ND		mg/l	0.500	--	1	-	12/09/21 10:23	44,300.0	JT

Lab Control Sample Analysis

Batch Quality Control

Project Name: 402 RINDGE AVENUE
Project Number: 6804.9.A4

Lab Number: L2166691
Report Date: 12/21/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1579059-2								
Chlorine, Total Residual	96		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1579069-2								
Chromium, Hexavalent	102		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1579462-2								
Phenolics, Total	102		-		70-130	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1579541-2								
TPH	73		-		64-132	-		34
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1579569-2								
Solids, Total Suspended	102		-		80-120	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1579827-1								
pH	100		-		99-101	-		5
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1580414-2								
Cyanide, Total	100		-		90-110	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 402 RINDGE AVENUE

Project Number: 6804.9.A4

Lab Number: L2166691

Report Date: 12/21/21

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1580539-2					
Nitrogen, Ammonia	99	-	80-120	-	20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 Batch: WG1581380-2					
Chloride	96	-	90-110	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: 402 RINDGE AVENUE
Project Number: 6804.9.A4

Lab Number: L2166691
Report Date: 12/21/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1579059-4 QC Sample: L2166691-01 Client ID: GP-10 (OW)												
Chlorine, Total Residual	ND	0.25	ND	**0**	Q	-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1579069-4 QC Sample: L2166691-01 Client ID: GP-10 (OW)												
Chromium, Hexavalent	ND	0.1	0.102	102		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1579462-4 QC Sample: L2166691-01 Client ID: GP-10 (OW)												
Phenolics, Total	ND	0.4	0.38	96		-	-		70-130	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1579541-4 QC Sample: L2162725-81 Client ID: MS Sample												
TPH	ND	19.4	ND	**0**	Q	-	-		64-132	-		34
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1580414-4 QC Sample: L2167182-02 Client ID: MS Sample												
Cyanide, Total	ND	0.2	0.653	**326**	Q	-	-		90-110	-		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1580539-4 QC Sample: L2162725-91 Client ID: MS Sample												
Nitrogen, Ammonia	0.185	4	3.80	90		-	-		80-120	-		20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1581380-3 QC Sample: L2164731-07 Client ID: MS Sample												
Chloride	106	40	144	95		-	-		90-110	-		18

Lab Duplicate Analysis
Batch Quality Control

Project Name: 402 RINDGE AVENUE
Project Number: 6804.9.A4

Lab Number: L2166691
Report Date: 12/21/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1579059-3 QC Sample: L2166627-02 Client ID: DUP Sample						
Chlorine, Total Residual	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1579069-3 QC Sample: L2166691-01 Client ID: GP-10 (OW)						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1579462-3 QC Sample: L2166691-01 Client ID: GP-10 (OW)						
Phenolics, Total	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1579541-3 QC Sample: L2162725-80 Client ID: DUP Sample						
TPH	ND	ND	mg/l	NC		34
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1579569-3 QC Sample: L2165939-01 Client ID: DUP Sample						
Solids, Total Suspended	21	22	mg/l	5		29
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1579827-2 QC Sample: L2166257-01 Client ID: DUP Sample						
pH	7.0	7.3	SU	4		5
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1580414-3 QC Sample: L2167182-01 Client ID: DUP Sample						
Cyanide, Total	ND	ND	mg/l	NC		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1580539-3 QC Sample: L2162725-91 Client ID: DUP Sample						
Nitrogen, Ammonia	0.185	0.107	mg/l	**53**	Q	20
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1581380-4 QC Sample: L2164731-07 Client ID: DUP Sample						
Chloride	106	106	mg/l	0		18

Project Name: 402 RINDGE AVENUE
Project Number: 6804.9.A4

Lab Number: L2166691
Report Date: 12/21/21

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2166691-01A	Vial unpreserved	A	NA		2.0	Y	Absent		SUB-ETHANOL(14)
L2166691-01B	Vial unpreserved	A	NA		2.0	Y	Absent		SUB-ETHANOL(14)
L2166691-01C	Vial unpreserved	A	NA		2.0	Y	Absent		SUB-ETHANOL(14)
L2166691-01D	Vial Na2S2O3 preserved	A	NA		2.0	Y	Absent		624.1-SIM-RGP(7),624.1-RGP(7)
L2166691-01E	Vial Na2S2O3 preserved	A	NA		2.0	Y	Absent		624.1-SIM-RGP(7),624.1-RGP(7)
L2166691-01F	Vial Na2S2O3 preserved	A	NA		2.0	Y	Absent		624.1-SIM-RGP(7),624.1-RGP(7)
L2166691-01G	Vial Na2S2O3 preserved	A	NA		2.0	Y	Absent		624.1-SIM-RGP(7),624.1-RGP(7)
L2166691-01I	Vial Na2S2O3 preserved	A	NA		2.0	Y	Absent		504(14)
L2166691-01J	Vial Na2S2O3 preserved	A	NA		2.0	Y	Absent		504(14)
L2166691-01K	Vial Na2S2O3 preserved	A	NA		2.0	Y	Absent		504(14)
L2166691-01L	Vial Na2S2O3 preserved	A	NA		2.0	Y	Absent		504(14)
L2166691-01M	Plastic 250ml NaOH preserved	A	>12	>12	2.0	Y	Absent		TCN-4500(14)
L2166691-01N	Plastic 250ml HNO3 preserved	A	<2	<2	2.0	Y	Absent		CD-2008T(180),NI-2008T(180),ZN-2008T(180),CU-2008T(180),FE-UI(180),HARDU(180),AS-2008T(180),HG-U(28),SE-2008T(180),AG-2008T(180),SB-2008T(180),PB-2008T(180),CR-2008T(180)
L2166691-01O	Plastic 950ml unpreserved	A	7	7	2.0	Y	Absent		HEXCR-7196(1),CL-300(28),TRC-4500(1),PH-4500(.01)
L2166691-01P	Plastic 950ml unpreserved	A	7	7	2.0	Y	Absent		TSS-2540(7)
L2166691-01Q	Plastic 500ml H2SO4 preserved	A	<2	<2	2.0	Y	Absent		NH3-4500(28)
L2166691-01R	Amber 950ml H2SO4 preserved	A	<2	<2	2.0	Y	Absent		TPHENOL-420(28)
L2166691-01S	Amber 1000ml Na2S2O3	A	7	7	2.0	Y	Absent		PCB-608.3(365)
L2166691-01T	Amber 1000ml Na2S2O3	A	7	7	2.0	Y	Absent		PCB-608.3(365)
L2166691-01U	Amber 1000ml Na2S2O3	A	7	7	2.0	Y	Absent		PCB-608.3(365)
L2166691-01V	Amber 1000ml Na2S2O3	A	7	7	2.0	Y	Absent		625.1-RGP(7),625.1-SIM-RGP(7)

*Values in parentheses indicate holding time in days

Project Name: 402 RINDGE AVENUE
Project Number: 6804.9.A4

Lab Number: L2166691
Report Date: 12/21/21

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2166691-01W	Amber 1000ml Na2S2O3	A	7	7	2.0	Y	Absent		625.1-RGP(7),625.1-SIM-RGP(7)
L2166691-01X	Amber 1000ml Na2S2O3	A	7	7	2.0	Y	Absent		625.1-RGP(7),625.1-SIM-RGP(7)
L2166691-01Y	Amber 1000ml HCl preserved	A	NA		2.0	Y	Absent		TPH-1664(28)
L2166691-01Z	Amber 1000ml HCl preserved	A	NA		2.0	Y	Absent		TPH-1664(28)

*Values in parentheses indicate holding time in days

Project Name:	402 RINDGE AVENUE	**Lab Number:**	L2166691
Project Number:	6804.9.A4	**Report Date:**	12/21/21

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report

Project Name:	402 RINDGE AVENUE	**Lab Number:**	L2166691
Project Number:	6804.9.A4	**Report Date:**	12/21/21

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the reporting limit (RL) for the sample.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where

Report Format: Data Usability Report

Project Name:	402 RINDGE AVENUE	**Lab Number:**	L2166691
Project Number:	6804.9.A4	**Report Date:**	12/21/21

Data Qualifiers

the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: Data Usability Report

Project Name:	402 RINDGE AVENUE	**Lab Number:**	L2166691
Project Number:	6804.9.A4	**Report Date:**	12/21/21

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.

4 Methods for Chemical Analysis of Water and Wastes. EPA 600/4-79-020. Revised March 1983.

14 Methods for the Determination of Organic Compounds in Finished Drinking Water and Raw Source Water. EPA/600/4-88/039, Revised July 1991.

19 Inductively Coupled Plasma Atomic Emission Spectrometric Method for Trace Element Analysis of Water and Wastes. Appendix C, Part 136, 40 CFR (Code of Federal Regulations). July 1, 1999 edition.

44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.

107 Alpha Analytical - In-house calculation method.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

127 Method 608.3: Organochlorine Pesticides and PCBs by GC/HSD, EPA 821-R-16-009, December 2016.

128 Method 624.1: Purgeables by GC/MS, EPA 821-R-16-008, December 2016.

129 Method 625.1: Base/Neutrals and Acids by GC/MS, EPA 821-R-16-007, December 2016.

140 Method 1664,Revision B: N-Hexane Extractable Material (HEM; Oil & Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, EPA-821-R-10-001, February 2010.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

CHAIN OF COUSTODY

PAGE OF

ALPHA ANALYTICAL
World Class Chemistry

Westborough, MA
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA
TEL: 508-822-9300
FAX: 508-822-3288

Date Rec'd in Lab: 12/03/21

ALPHA Job #: L2166691

Project Information

Project Name: 402 Rindge Avenue

Project Location: Cambridge, MA

Project #: 6804.9.A4

Project Manager: John Miller

ALPHA Quote #:

Client Information

Client: McPhail Associates, LLC

Address: 2269 Massachusetts Avenue

Cambridge, MA 02140

Phone: (617) 868-1420

Fax:

Email: jmiller@mcphailgeo.com

☐ These samples have been Previously analyzed by Alpha

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: Time:

Report Information Data Deliverables

☐ FAX ☒ EMAIL

☒ ADEx ☐ Add'l Deliverables

Billing Information

☒ Same as Client info

PO #:

Regulatory Requirements/Report Limits

State/Fed Program	Criteria
NPDES RGP	

MCP Analytical Methods

Other Project Specific Requirements/Comments/Detection Limits:

Circle the following if required:

SALINITY HARDNESS [✓ PH]

[✓ Sect. A inorganics]: Ammonia, Chloride, TRC, TSS, CrVI, CrIII, Tot-CN, RGP Metals
B- Non-Hal- VOC- 624.1, 624.1-SIM, Tot. Phenol Sect C- VOC- 624.1 & 504
D:625.1/625.1-SIM: E- PCB's, PCP(625.1-SIM): F-TPH, 8260, Sub-Ethanol

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	RGP Metals (200.8) (A)	TSS- (A)	Ammonia (4500 (A))	TCN (A)	HexCr (7196), TRC, Cl- (A)	624.1(B, C, F) 624.1-simSIM (B)	Tphenol-420 (B)	504-EDB (C)	625.1/625.1SIM- (D, E)	PCB-608- (E)	TPH-1664-(F)	SUB-ETHANOL (F)	Sample Specific Comments	TOTAL # BOTTLES
66691 -01	GP-10 (OW)	12/03/21	12:30	GW	CHS	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒		25
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
					Container Type	P	P	P	P	P	V	A	V	A	A	A	V		
					Preservative	C	A	D	E	A	B	D	H	A	H	B	B		

SAMPLE HANDLING
Filtration
☐ Done
☐ Not Needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Relinquished By:	Date/Time	Received By:	Date/Time
Chris Skeldon	12/3/21 13:45	McPhail hold Fridge	12/3 13:45
McPhail hold fridge	12/3/21 1735	AAL	12/3/21 1735
	12/3/21 1842		12/3/1842

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms.

FORM NO: 01-01(I-NJ)
(rev. 5-JAN-12)

ALPHA ANALYTICAL
World Class Chemistry

Subcontract Chain of Custody

Tek Lab, Inc.
5445 Horsehoe Lake Road
Collinsville, IL 62234-7425

Alpha Job Number
L2166691

Client Information

Client: Alpha Analytical Labs
Address: Eight Walkup Drive
Westborough, MA 01581-1019

Phone: 603.319.5010
Email: mgulli@alphalab.com

Project Information

Project Location: MA
Project Manager: Melissa Gulli

Turnaround & Deliverables Information

Due Date:
Deliverables:

Regulatory Requirements/Report Limits

State/Federal Program:

Regulatory Criteria:

Project Specific Requirements and/or Report Requirements

Reference following Alpha Job Number on final report/deliverables: L2166691

Report to include Method Blank, LCS/LCSD:

Additional Comments: Send all results/reports to subreports@alphalab.com

Lab ID	Client ID	Collection Date/Time	Sample Matrix	Analysis	Batch QC
	GP-10 (OW)	12-03-21 12:30	WATER	Ethanol by EPA 1671 Revision A	

	Relinquished By:	Date/Time:	Received By:	Date/Time:
		12/6/21		
Form No: AL_subcoc				

December 10, 2021

Illinois	100226
Kansas	E-10374
Louisiana	05002
Louisiana	05003
Oklahoma	9978

Melissa Gulli
Alpha Analytical
145 Flanders Road
Westborough, MA 01581
TEL: (603) 319-5010
FAX:

RE: L2166691 **WorkOrder:** 21120402

Dear Melissa Gulli:

TEKLAB, INC received 1 sample on 12/7/2021 9:57:00 AM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Elizabeth A. Hurley
Project Manager
(618)344-1004 ex 33
ehurley@teklabinc.com

Report Contents

http://www.teklabinc.com/

Client: Alpha Analytical
Work Order: 21120402
Client Project: L2166691
Report Date: 10-Dec-21

This reporting package includes the following:

Definitions

http://www.teklabinc.com/

Client: Alpha Analytical **Work Order:** 21120402

Client Project: L2166691 **Report Date:** 10-Dec-21

Abbr	Definition
*	Analytes on report marked with an asterisk are not NELAP accredited
CCV	Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
CRQL	A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.
DF	Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.
DNI	Did not ignite
DUP	Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.
ICV	Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
IDPH	IL Dept. of Public Health
LCS	Laboratory control sample is a sample matrix, free from the analytes of interest,spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.
LCSD	Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MBLK	Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
MDL	"The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."
MS	Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
MSD	Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MW	Molecular weight
NC	Data is not acceptable for compliance purposes
ND	Not Detected at the Reporting Limit
NELAP	NELAP Accredited
PQL	Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.
RL	The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
RPD	Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
SPK	The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.
Surr	Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
TIC	Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"
TNTC	Too numerous to count (> 200 CFU)

Definitions

http://www.teklabinc.com/

Client: Alpha Analytical **Work Order:** 21120402

Client Project: L2166691 **Report Date:** 10-Dec-21

Qualifiers

# -	Unknown hydrocarbon	B -	Analyte detected in associated Method Blank
C -	RL shown is a Client Requested Quantitation Limit	E -	Value above quantitation range
H -	Holding times exceeded	I -	Associated internal standard was outside method criteria
J -	Analyte detected below quantitation limits	M -	Manual Integration used to determine area response
ND -	Not Detected at the Reporting Limit	R -	RPD outside accepted recovery limits
S -	Spike Recovery outside recovery limits	T -	TIC(Tentatively identified compound)
X -	Value exceeds Maximum Contaminant Level		

Case Narrative

http://www.teklabinc.com/

Client: Alpha Analytical
Work Order: 21120402
Client Project: L2166691
Report Date: 10-Dec-21

Cooler Receipt Temp: 1.8 °C

Locations

Collinsville

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email jhriley@teklabinc.com

Springfield

Address 3920 Pintail Dr
Springfield, IL 62711-9415
Phone (217) 698-1004
Fax (217) 698-1005
Email KKlostermann@teklabinc.com

Kansas City

Address 8421 Nieman Road
Lenexa, KS 66214
Phone (913) 541-1998
Fax (913) 541-1998
Email jhriley@teklabinc.com

Collinsville Air

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email EHurley@teklabinc.com

Chicago

Address 1319 Butterfield Rd.
Downers Grove, IL 60515
Phone (630) 324-6855
Fax
Email arenner@teklabinc.com

Accreditations

http://www.teklabinc.com/

Client: Alpha Analytical
Work Order: 21120402
Client Project: L2166691
Report Date: 10-Dec-21

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2022	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2022	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2022	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2022	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2022	Collinsville
Arkansas	ADEQ	88-0966		3/14/2022	Collinsville
Illinois	IDPH	17584		5/31/2023	Collinsville
Kentucky	UST	0073		1/31/2022	Collinsville
Missouri	MDNR	00930		5/31/2023	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville

Laboratory Results

http://www.teklabinc.com/

Client: Alpha Analytical
Work Order: 21120402
Client Project: L2166691
Report Date: 10-Dec-21
Lab ID: 21120402-001
Client Sample ID: GP-10 (OW)
Matrix: AQUEOUS
Collection Date: 12/03/2021 12:30

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA 600 1671A, PHARMACEUTICAL MANUFACTURING INDUSTRY NON-PURGEABLE VOLATILE ORGANICS								
Ethanol	*	20		**ND**	mg/L	1	12/07/2021 17:07	R303549

Quality Control Results

http://www.teklabinc.com/

Client: Alpha Analytical **Work Order:** 21120402

Client Project: L2166691 **Report Date:** 10-Dec-21

EPA 600 1671A, PHARMACEUTICAL MANUFACTURING INDUSTRY NON-PURGEABLE VOLATILE OR

Batch R303549 **SampType:** MBLK Units **mg/L**

SampID: MBLK-120721

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Ethanol	*	20		**ND**						12/07/2021

Batch R303549 **SampType:** LCS Units **mg/L**

SampID: LCS-120721

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Ethanol	*	20		**260**	250.0	0	105.2	70	132	12/07/2021

Batch R303549 **SampType:** MS Units **mg/L**

SampID: 21120402-001AMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Ethanol	*	20		**260**	250.0	0	105.8	70	132	12/07/2021

Batch R303549 **SampType:** MSD Units **mg/L** RPD Limit: **30**

SampID: 21120402-001AMSD

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Ethanol	*	20		**300**	250.0	0	118.4	264.6	11.23	12/07/2021

Receiving Check List

http://www.teklabinc.com/

Client: Alpha Analytical
Client Project: L2166691

Work Order: 21120402
Report Date: 10-Dec-21

Carrier: UPS

Received By: MEK

Completed by: Mary E. Kemp
On: 07-Dec-21

Reviewed by: Elizabeth A. Hurley
On: 07-Dec-21

Pages to follow: Chain of custody 1 Extra pages included 0

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	Temp °C 1.8
Type of thermal preservation?	None ☐	Ice ☑	Blue Ice ☐	Dry Ice ☐
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Reported field parameters measured:	Field ☐	Lab ☐	NA ☑	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐		

When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.

Water – at least one vial per sample has zero headspace?	Yes ☑	No ☐	No VOA vials ☐
Water - TOX containers have zero headspace?	Yes ☐	No ☐	No TOX containers ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	NA ☐
NPDES/CWA TCN interferences checked/treated in the field?	Yes ☐	No ☐	NA ☑

Any No responses must be detailed below or on the COC.

21120402

Subcontract Chain of Custody

Tek Lab, Inc.
5445 Horsehoe Lake Road
Collinsville, IL 62234-7425

Alpha Job Number
L2166691

Client Information

Client: Alpha Analytical Labs
Address: Eight Walkup Drive
Westborough, MA 01581-1019

Phone: 603.319.5010
Email: mgulli@alphalab.com

Project Information

Project Location: MA
Project Manager: Melissa Gulli

Turnaround & Deliverables Information

Due Date:
Deliverables:

Regulatory Requirements/Report Limits

State/Federal Program:
Regulatory Criteria:

Project Specific Requirements and/or Report Requirements

Reference following Alpha Job Number on final report/deliverables: L2166691

Report to include Method Blank, LCS/LCSD:

Additional Comments: Send all results/reports to subreports@alphalab.com

Lab ID	Client ID	Collection Date/Time	Sample Matrix	Analysis	Batch QC
21120402-001	GP-10 (OW)	12-03-21 12:30	WATER	Ethanol by EPA 1671 Revision A	

* 1.8°C LTG 1
Ø HS PR 12/7/21

	Relinquished By:	Date/Time:	Received By:	Date/Time:
		12/6/21	Mary Kump (UPS)	12/7/21 0957

Form No: AL_subcoc

PR
12/7/21

APPENDIX E:

LABORATORY ANALYTICAL DATA – SURFACE WATER

ANALYTICAL REPORT

Lab Number:	L2169080
Client:	McPhail Associates 2269 Massachusetts Avenue Cambridge, MA 02140
ATTN:	Ambrose Donovan
Phone:	(617) 868-1420
Project Name:	402 RINDGE AVE
Project Number:	6804.9.A4
Report Date:	12/21/21

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: 402 RINDGE AVE
Project Number: 6804.9.A4

Lab Number: L2169080
Report Date: 12/21/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2169080-01	OUTFALL	WATER	CAMBRIDGE, MA	12/15/21 13:30	12/15/21

Project Name:	402 RINDGE AVE	**Lab Number:**	L2169080
Project Number:	6804.9.A4	**Report Date:**	12/21/21

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Sebastian Corbin

Title: Technical Director/Representative Date: 12/21/21

METALS

Project Name: 402 RINDGE AVE
Project Number: 6804.9.A4
Lab Number: L2169080
Report Date: 12/21/21

SAMPLE RESULTS

Lab ID: L2169080-01
Client ID: OUTFALL
Sample Location: CAMBRIDGE, MA
Date Collected: 12/15/21 13:30
Date Received: 12/15/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Iron, Total	3.78		mg/l	0.050	--	1	12/16/21 16:31	12/18/21 01:26	EPA 3005A	19,200.7	EW
Lead, Total	0.01132		mg/l	0.00100	--	1	12/16/21 16:31	12/17/21 12:37	EPA 3005A	3,200.8	SV
Total Hardness by SM 2340B - Mansfield Lab											
Hardness	235		mg/l	0.660	NA	1	12/16/21 16:31	12/19/21 21:44	EPA 3005A	19,200.7	DL

Project Name: 402 RINDGE AVE
Project Number: 6804.9.A4
Lab Number: L2169080
Report Date: 12/21/21

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1584219-1										
Iron, Total	ND		mg/l	0.050	--	1	12/16/21 16:31	12/17/21 22:14	19,200.7	EW

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Hardness by SM 2340B - Mansfield Lab for sample(s): 01 Batch: WG1584219-1										
Hardness	ND		mg/l	0.660	NA	1	12/16/21 16:31	12/17/21 22:14	19,200.7	EW

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1584221-1										
Lead, Total	ND		mg/l	0.00100	--	1	12/16/21 16:31	12/17/21 11:07	3,200.8	SV

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 402 RINDGE AVE

Project Number: 6804.9.A4

Lab Number: L2169080

Report Date: 12/21/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1584219-2								
Iron, Total	100		-		85-115	-		
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01 Batch: WG1584219-2								
Hardness	106		-		85-115	-		
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1584221-2								
Lead, Total	98		-		85-115	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: 402 RINDGE AVE
Project Number: 6804.9.A4

Lab Number: L2169080
Report Date: 12/21/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1584219-3 QC Sample: L2169095-01 Client ID: MS Sample												
Iron, Total	0.295	1	1.26	96		-	-		75-125	-		20
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1584219-3 QC Sample: L2169095-01 Client ID: MS Sample												
Hardness	226	66.2	291	98		-	-		75-125	-		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1584219-7 QC Sample: L2169095-02 Client ID: MS Sample												
Iron, Total	ND	1	0.967	97		-	-		75-125	-		20
Total Hardness by SM 2340B - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1584219-7 QC Sample: L2169095-02 Client ID: MS Sample												
Hardness	51.4	66.2	114	95		-	-		75-125	-		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1584221-3 QC Sample: L2169095-01 Client ID: MS Sample												
Lead, Total	0.00101	0.53	0.5483	103		-	-		70-130	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: 402 RINDGE AVE

Project Number: 6804.9.A4

Lab Number: L2169080

Report Date: 12/21/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1584219-4 QC Sample: L2169095-01 Client ID: DUP Sample						
Iron, Total	0.295	0.306	mg/l	4		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1584219-8 QC Sample: L2169095-02 Client ID: DUP Sample						
Iron, Total	ND	ND	mg/l	NC		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1584221-4 QC Sample: L2169095-01 Client ID: DUP Sample						
Lead, Total	0.00101	0.00108	mg/l	7		20

INORGANICS
&
MISCELLANEOUS

Project Name: 402 RINDGE AVE
Project Number: 6804.9.A4

Lab Number: L2169080
Report Date: 12/21/21

SAMPLE RESULTS

Lab ID: L2169080-01
Client ID: OUTFALL
Sample Location: CAMBRIDGE, MA

Date Collected: 12/15/21 13:30
Date Received: 12/15/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
pH (H)	7.1		SU	-	NA	1	-	12/15/21 22:32	121,4500H+-B	AS
Nitrogen, Ammonia	2.60		mg/l	0.075	--	1	12/20/21 11:20	12/20/21 20:35	121,4500NH3-BH	AT

Project Name: 402 RINDGE AVE
Project Number: 6804.9.A4
Lab Number: L2169080
Report Date: 12/21/21

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1585389-1										
Nitrogen, Ammonia	ND		mg/l	0.075	--	1	12/20/21 11:20	12/20/21 20:27	121,4500NH3-BH	AT

Lab Control Sample Analysis

Batch Quality Control

Project Name: 402 RINDGE AVE

Project Number: 6804.9.A4

Lab Number: L2169080

Report Date: 12/21/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1583921-1								
pH	100		-		99-101	-		5
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1585389-2								
Nitrogen, Ammonia	83		-		80-120	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: 402 RINDGE AVE
Project Number: 6804.9.A4

Lab Number: L2169080
Report Date: 12/21/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1585389-4 QC Sample: L2167038-01 Client ID: MS Sample												
Nitrogen, Ammonia	0.466	4	4.03	89		-	-		80-120	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: 402 RINDGE AVE

Project Number: 6804.9.A4

Lab Number: L2169080

Report Date: 12/21/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1583921-2 QC Sample: L2168317-01 Client ID: DUP Sample						
pH	7.6	7.5	SU	1		5
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1585389-3 QC Sample: L2167038-01 Client ID: DUP Sample						
Nitrogen, Ammonia	0.466	0.531	mg/l	13		20

Project Name: 402 RINDGE AVE
Project Number: 6804.9.A4

Lab Number: L2169080
Report Date: 12/21/21

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2169080-01A	Plastic 250ml unpreserved	A	7	7	2.0	Y	Absent		PH-4500(.01)
L2169080-01B	Plastic 250ml HNO3 preserved	A	<2	<2	2.0	Y	Absent		FE-UI(180),HARDU(180),PB-2008T(180)
L2169080-01C	Plastic 250ml HNO3 preserved	A	<2	<2	2.0	Y	Absent		FE-UI(180),HARDU(180),PB-2008T(180)
L2169080-01D	Plastic 250ml HNO3 preserved	A	<2	<2	2.0	Y	Absent		FE-UI(180),HARDU(180),PB-2008T(180)
L2169080-01E	Plastic 250ml H2SO4 preserved	A	<2	<2	2.0	Y	Absent		NH3-4500(28)
L2169080-01F	Plastic 250ml HNO3 preserved	A	<2	<2	2.0	Y	Absent		FE-UI(180),HARDU(180),PB-2008T(180)

*Values in parentheses indicate holding time in days

Project Name:	402 RINDGE AVE	**Lab Number:**	L2169080
Project Number:	6804.9.A4	**Report Date:**	12/21/21

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report

Project Name:	402 RINDGE AVE	**Lab Number:**	L2169080
Project Number:	6804.9.A4	**Report Date:**	12/21/21

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the reporting limit (RL) for the sample.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where

Report Format: Data Usability Report

Project Name:	402 RINDGE AVE	**Lab Number:**	L2169080
Project Number:	6804.9.A4	**Report Date:**	12/21/21

Data Qualifiers

the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: Data Usability Report

Project Name:	402 RINDGE AVE	**Lab Number:**	L2169080
Project Number:	6804.9.A4	**Report Date:**	12/21/21

REFERENCES

3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.

19 Inductively Coupled Plasma Atomic Emission Spectrometric Method for Trace Element Analysis of Water and Wastes. Appendix C, Part 136, 40 CFR (Code of Federal Regulations). July 1, 1999 edition.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

CHAIN OF CUSTODY

PAGE 1 OF 1

492 Rindge Ave

Date Rec'd in Lab: 12/15/21

ALPHA Job #: L2169080

8 Walkup Drive, Westboro, MA 01581, Tel: 508-898-9220
320 Forbes Blvd, Mansfield, MA 02048, Tel: 508-822-9300

Project Information

Project Name: [redacted]
Project Location: Cambridge, MA
Project #: 6804.9.44
Project Manager: John Miller
ALPHA Quote #:

Report Information - Data Deliverables

☒ ADEx ☐ EMAIL

Billing Information

☐ Same as Client info PO #:

Client Information

Client: McPhail Associates, LLC
Address: 2269 Massachusetts Avenue
Cambridge, MA 02140
Phone: (617) 868-1420
Email: JMiller @McPhailgeo.com

Turn-Around Time

☒ Standard ☐ RUSH *(only confirmed if pre-approved!)*
Date Due:

Additional Project Information:

☐ Run TCLP (if triggered)

Regulatory Requirements & Project Information Requirements

☐ Yes ☐ No MA MCP Analytical Methods ☐ Yes ☒ No CT RCP Analytical Methods
☐ Yes ☒ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)
☐ Yes ☒ No GW1 Standards (Info Required for Metals & EPH with Targets)
☒ Yes ☐ No NPDES RGP
☐ Other State /Fed Program _____ Criteria _____

Sample "Sample ID" Nomenclature: B-100, S-1

ALPHA Lab ID (Lab Use Only)	Sample ID	Sample Depth	Sample Material	Collection Date	Collection Time	Sampler Initials	Soil Assessment Package IV (less VOC)	VOC: ☐ 8260	Total Solids	SVOC: ☐ PAH	EPH: ☐ Ranges & Targets ☐ Ranges Only	VPH: ☐ Ranges & Targets ☐ Ranges Only	TOTAL METALS: ☐ RCRA8 ☐ PP13 ☐ MCP 14	DISSOLVED METALS: ☐ RCRA8 ☐ PP13 ☐ MCP 14	METALS: Total Sb,Be,Ni,Tl,V,Zn	☐ PCBs ☐ Pesticides	RGP Section A Inorganics	Hardness, Total Fe, Pb	Ammonia	pH	SAMPLE INFO Filtration ☐ Field ☐ Lab to do Preservation ☐ Lab to do Sample Comments	TOTAL # BOTTLES
69050-01	Outfall	—		12/15/21	13:30	LTE												X	X	X		6

Container Type
A=Amber glass
B=Bacteria cup
C=Cube
D=BOD bottle
E=Encore
G=Glass
O=Other
P=Plastic
V=Vial

Sample Material
F=Fill S=Sand
O=Organics C=Clay
N=Natural T=Till
GM=Glaciomarine
GW=Groundwater

Preservative
A=None
B=HCl
C=HNO_3
D=H_2SO_4
E=NaOH
F=MeOH
G=$NaHSO_4$
H=$Na_2S_2O_3$
I=Ascorbic Acid
J=NH_4Cl
K=Zn Acetate
O=Other

RGP Section A Inorganics:
Ammonia, Chloride, TRC, TSS, CrVI, CrIII, Total Cyanide, Total RGP Metals

Container Type			P
Preservative			C

Relinquished By:	Date/Time	Received By:	Date/Time
	12/15/21 15:00	McPhail Associates secure sample storage for laboratory pick-up	
McPhail Associates secure sample storage for laboratory pick-up		Rob Maerto AAL	12/15/21 16:40
Rob Maerto 12/15/21 1755			12/15/21 1755

All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

DOC ID: 25188 Rev 0 (11/28/2017)

APPENDIX F:

BEST MANAGEMENT PRACTICE PLAN

BEST MANAGEMENT PRACTICES PLAN

A Notice of Intent for a Remediation General Permit (RGP) under the National Pollutant Discharge Elimination System (NPDES) has been submitted to the US Environmental Protection Agency (EPA) in anticipation of temporary construction dewatering that will occur during redevelopment of 402 Rindge Avenue property in Cambridge, Massachusetts. This Best Management Practices Plan (BMPP) has been prepared as an Appendix to the RGP and will be posted at the site during the time period that temporary construction dewatering is occurring at the site.

Water Treatment and Management

During construction of the proposed building foundation, dewatering effluent is anticipated to be pumped from localized sumps and trenches within the excavation directly into a settling tank. The effluent will then flow through the necessary treatment systems and discharge through hoses or piping connected into the storm water drain D37CBN0341 located on the southern portion of the subject site. Based upon a review of the City of Cambridge Department of Public Works stormwater drainage plan, the above referenced stormwater drain system ultimately discharges into the Little River at outfall D45OF0000.

Discharge Monitoring and Compliance

Regular sampling and testing will be conducted at the influent to the system and the treated effluent as required by the RGP. During the first week of discharge, the operator must sample the untreated influent and treated effluent two times: one (1) sample of untreated influent and one (1) sample of treated effluent be collected on the first day of discharge, and one (1) sample of untreated influent and one (1) sample of treated effluent must be collected on one additional non-consecutive day within the first week of discharge. Samples must be analyzed in accordance with 40 CFR §136 unless otherwise specified by the RGP, with a maximum 5-day turnaround time and results must be reviewed no more than 48 hours from receipt of the results of each sampling event. After the first week, samples may be analyzed with up to a ten (10)-day turnaround time and results must be reviewed no more than 72 hours from receipt of the results. If the treatment system is operating as designed and achieving the effluent limitations outlined in the RGP, on-going sampling shall be conducted weekly for three (3) additional weeks beginning no earlier than 24 hours following initial sampling, and monthly as described below. Any adjustments/reductions in monitoring frequency must be approved by EPA in writing.

In accordance with Part 4.1 of the RGP, the operator must perform routine monthly monitoring for both influent and effluent beginning no more than 30 days following the completion of the sampling requirements for new discharges or discharges that have been interrupted. The routine monthly monitoring is to be conducted through the end of the scheduled discharge. The routine monthly monitoring must continue for five (5) consecutive months prior to submission of any request for modification of monitoring frequency.

Dewatering activity for the Site is classified as Category III-G: Sites with Known Contamination. Monitoring shall include analysis of influent and effluent samples for the presence of pH and inorganics as listed in the RGP including: ammonia, chloride, total residual chlorine, total suspended solids, antimony, arsenic, cadmium, chromium III, chromium VI, copper, lead, mercury, nickel, selenium, silver, zinc, and cyanide.

Monitoring will include checking the condition of the treatment system, assessing the need for treatment system adjustments based on monitoring data, observing, and recording daily flow rates and discharge quantities, and verifying the flow path of the discharged effluent.

The total monthly flow will be monitored by checking and documenting the flow through the flow meter to be installed on the system. Flow will be maintained below the "system design flow" by regularly monitoring flow and adjusting the amount of construction dewatering as needed. Monthly monitoring reports will be compiled and maintained at the site.

System Maintenance

A number of methods will be used to minimize the potential for violations during the term of this permit discharge. Scheduled regular maintenance and periodic cleaning of the treatment system will be conducted to verify proper operation and shall be conducted in accordance with Section 1.11 of the project earthwork specifications. Regular maintenance will include checking the condition of the treatment system equipment such as the settling tanks, bag filters, hoses, pumps, and flow meters. Equipment will be monitored daily for potential matters and unscheduled maintenance requirements.

Employees who have direct or indirect responsibility for ensuring compliance with the RGP will be trained by the Contractor.

Miscellaneous Items

It is anticipated that the erosion control measures and the nature of the site will minimize potential runoff to or from the site. The project specifications also include requirements for erosion control. Site security for the treatment system will be addressed within the overall site security plan.

No adverse effects on designated uses of surrounding surface water bodies are anticipated. The nearest surface water body is the Jerry's Pond located on the opposite side of Rindge Avenue to the northeast of the subject site. Dewatering effluent will be pumped into a

settling tank. Water within the settling tank will pumped through bag filters and GAC filters prior to discharge into the storm drains.

Management of Treatment System Materials

Dewatering effluent will be pumped directly into the treatment system from the excavation with use of hoses and localized sumps to minimize handling. The Contractor will establish staging areas for equipment or materials storage that may be possible sources of pollution away from any dewatering activities, to the extent practicable.

Sediment from the tank used in the treatment system will be characterized and removed from the site to an appropriate receiving facility, in accordance with applicable laws and regulations. Bag filters will be replaced/disposed of, as necessary.